Southern California's Computer Magazine

March 6, 1995 • #134

FREE

# MicroTimes™

BAM ACCESS TO MARKETS
BAM MEDIA
BAM ACCESS TO MARKETS

IN THIS ISSUE:

- How Big Is The Internet?
- Knowbots On The Net
- New Web Pages
- QuickTime Virtual Reality

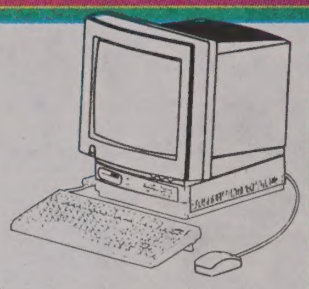
MultiMedia & Beyond—
Providing Information And Resources To The Producers & Consumers Of Multimedia. See Inside!

## SimEmpire
## Maxis Looks Forward

Maxis cofounder and CEO Jeff Braun:
"Creative applications are uniquely suited to the computer. It's an enabling medium. You don't become interactive to be told what to do. Most people don't like to be told what to do—not children, not adults."

# COMPAQ

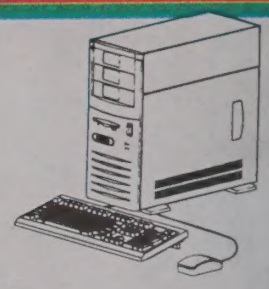
## COMPAQ 486DX2 66MHz PRESARIO 524CDS 420MB MULTIMEDIA SYSTEM



486DX2-66MHz CPU • 420MB Hard Drive • 4MB RAM
14,400 BPS Internal Fax/Modem • Internal CD-ROM
Built-in 14" SVGA Display • MS DOS • MS Windows
#1990674

**$1695**

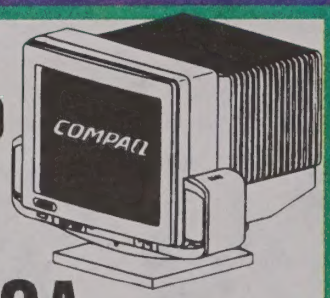
## COMPAQ 486DX2 66MHz PRESARIO 924 MINI TOWER SYSTEM



486DX2-66MHz CPU • 420MB Hard Drive • 8MB RAM expandable to 100MB
1MB VRAM expandable to 2MB • 5 ISA expansion slots • Built-In Speakerphone
14,400 BPS Internal Fax/Modem
**Preinstalled Software:** MS DOS 6.2 • MS Windows 3.1 • TabWorks • Quicken • Media Pilot • Welcome Center • MS Encarta CD • MS Works CD • Prodigy • America On-Line CompuServe • ImagiNation Network • Home Survival Toolkit
Kidsoft CD
The Even More Incredible Machine and more!
**Monitor Not Included**
#1947078

**$1695**

## COMPAQ NON-INTERLACED 1024X 768 .28 DOT PITCH 14" SUPER VGA MULTIMEDIA MONITOR




Built-In Speakers and Microphone
#1947126

**$399**

## COMPAQ 486DX2 40MHz CONTURA 400CX 250MB ACTIVE COLOR NOTEBOOK

486DX2 40MHz CPU • 250MB Hard Drive • 4MB RAM
3.5" 1.44MB Floppy Drive • Active Matrix Color • PCMCIA • Trackball
#1962747

**$2695**

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

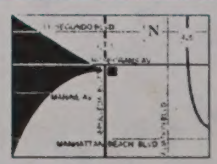
FRY'S ELECTRONICS

*Prices Good Through March 28, 1995*

*Limit Rights Reserved. Not responsible for typographical errors.*

**STORE HOURS**
**MONDAY - FRIDAY**
**8AM - 9PM**
**SATURDAY**
**9AM - 8PM**
**SUNDAY**
**9AM - 7PM**

***Fountain Valley***
**10800 Kalama River Ave.**
**(714) 378-4400**
**CORP. P.O. FAX (714) 378-4444**



***Manhattan Beach***
**3600 Sepulveda Blvd.**
**(310) 364-FRYS (3797)**
**CORP. P.O. FAX (310) 364-3700**

DISCOVER NOVUS
VISA
MasterCard
**DISCOVER, VISA AND MASTERCARD ACCEPTED.**

# Get a load of these New! CompuCal PCs & load-up on MAXIMIZED POWER for LESS!

## Deluxe Accessories

Complete Manual, Setup Diskettes, Deluxe Bag, AC-DC Charger, Car Adapter, Type-II NiCAD or NiMH Battery

## Included Features

- **4 MB RAM**
- **260 MB HD** (Removable HD design)
- Type-2 NiCAD Battery
- Large 9.4" Active, Dual Scan Color or Mono LCD
- 128K ext. cache (DX4/75)
- **512K Video RAM**, upgradable to 1MB
- Built-in 1.44 MB floppy
- PS/2 Keyboard port
- 2 Serial, 1 Parallel ports
- **Ergonomic Trackball**
- **Ergonomic Palm-Rest**
- **Built-in 10-key Pad**
- **PCMCIA** type I, II, III
- Front-mounted contrast & brightness controls
- **Deluxe Carrying Case**
- **AC/DC Charger**
- Complete manual
- Complete setup S/W
- MS-DOS 6.22

*Many options available!*

## 486 DX2/66 MONO GREYSCALE

**$1399**

**4 MB RAM ● 260 MB HD**

Up to 20MB RAM And 810MB HD

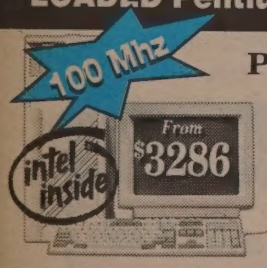
### DUAL-SCAN COLOR

| | |
|---|---|
| *i*486DX2/66 | $2289 |
| DX4/75 | $2439 |
| DX4/100 | $2589 |

## Available Extras *(Call for Prices)*

- Up to 20 MB RAM
- Up to 810 MB Removable HD
- 2nd Battery, NiMH or NiCAD
- PCMCIA 14.4 Fax Modem
- PCMCIA Network Card
- External 14.4 Fax Modem
- Extra Battery Charger
- SCSI Cable
- Audio Port
- Upgrade to Active Color or Dual Scan Color Display

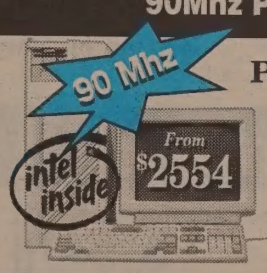
## LOADED Pentium "Giga-Station"




**Pentium/100 PCI $3286**

- **16 MB RAM exp. to 128 MB**
- **256K** cache, exp. to 512KB
- **1080 MB** IDE HD ● 1.44 floppy drive
- **Quad 4X CD**, 16-bit sound, KOSS spkrs
- **15" .28 Flatscreen** SVGA-NI, 1280
- Roomy 7-bay tower case
- 64-bit PCI graphics accelerator, 1 MB
- AT I/O, Hi-Res Serial Mouse

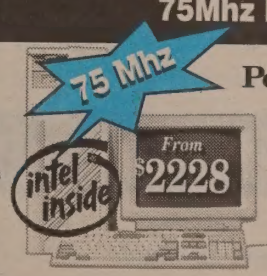
## 90Mhz Pentium Powerhouse




**Pentium/90 PCI $2554**

- **8 MB RAM exp. to 128 MB**
- **256K** cache, exp. to 512KB
- **730 MB** IDE HD ● 1.44 floppy drive
- **Quad 4X CD**, 16-bit sound, KOSS spkrs
- **15" .28 Flatscreen** SVGA-NI, 1280
- Roomy 7-bay tower case
- 64-bit PCI graphics accelerator, 1 MB
- AT I/O, Hi-Res Serial Mouse

## 75Mhz Pentium Media-PC




**Pentium/75 PCI $2228**

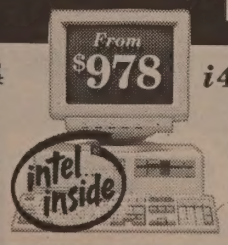
- **8 MB RAM exp. to 128 MB**
- **256K** cache, exp. to 512KB
- **730 MB** IDE HD ● 1.44 floppy drive
- **2X CD**, 16bit sound, KOSS spkrs
- **15" .28 Flatscreen** SVGA-NI, 1280
- Roomy 7-bay tower case
- 64-bit PCI graphics accelerator, 1 MB
- AT I/O, Hi-Res Serial Mouse

## Basic 486 / Multi-Media CD

***i*486DX2/66 VLB $1394**

- **8 MB RAM** ● **256K** secondary cache
- **420 MB** IDE HD ● 1.44 floppy drive
- **Double-speed CD-ROM**,16-Bit Sound-Blaster Comp Soundcard & Hi-Fi Speakers
- **14" SVGA-NI** .28dp monitor, 1280x1024
- VLB or PCI video accelerator, 1 MB
- AT I/O, Hi-Res Serial Mouse

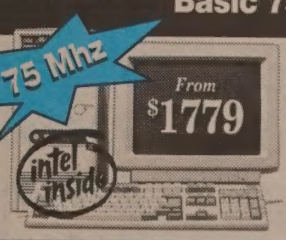
## Basic 486 System




***i*486DX/33 VLB $978**

- **4 MB RAM expandable**
- **128K** secondary cache
- **420 MB** IDE hard drive
- 1.44 floppy disk drive, 1.2 MB opt.
- **14" .28dp SVGA-NI** monitor, 1280
- VLB video accelerator, 1 MB
- AT I/O, Hi-Res Serial Mouse

## Basic 75Mhz Pentium PC




**Pentium/75 PCI $1779**

- **8 MB RAM exp. to 128MB**
- **256K** cache, exp. to 512K
- **540 MB** IDE HD ● 1.44 floppy drive
- **14" .28dp SVGA-NI** monitor, 1280
- Roomy 7-bay tower case
- Fast PCI video accelerator, 1 MB
- AT I/O, Hi-Res Serial Mouse

## Fax Modems

- Supra 14.4 S/R Int ..... $ 89
- Supra 14.4 S/R Ext ... $ 129
- Supra 14.4 S/R Mac .. $ 139
- Quicktel 14.4 S/R Int ... $ 85
- 28.8 V34 S/R Int..... $ 199
- PCMCIA 14.4 F-mdm . $ 169
- 28.8 V34 S/R Int..... $ 199

## Memory SIMMs

- 1 MB RAM 30-pin ..... $ 41
- 4 MB RAM 30-pin ... $ 159
- 4 MB RAM 72-pin ... $ 169
- 8 MB / 16 MB RAM ..... call

**MAIN-LOGIC BOARDS**

- 486 ISA VLB-256K..... $ 119
- Pentium PCI-256K..... $ 259
- 486SLC-33 VLB-256K.. $ 105

## Input & Cards

- 101 Enh. Keyboard ..... $ 29
- 101 Kbd. w/trackball ... $ 69
- Microsoft Mouse 2.0 .... $ 52
- 10-key Serial Keypad... $ 39

**ADD-ON CARDS**

- SVGA-NI, 1MB..... $ 79
- Dmnd Stlth 64 VLB, 1 MB 149
- Dmnd Stlth 64 PCI, 2 MB 319

## Hard Drives

- 420 MB IDE ..... $ 195
- 540 MB IDE ..... $ 229
- 1 GigaByte ..... $ 479

**FLOPPY DISK DRIVES**

- 1.2 / 1.44 MB..... $ 45 / 41
- Colorado Trakker 350 $ 349
- Conner 420 Tape Dr . $ 189

## Laser Toner

- HP Toner II, III ..... $ 76
- HP Toner IIP, IIIP ..... $ 70
- HP Toner 4L ..... $ 60
- HP Toner IIISI, IVSI .. $ 129
- HP IV ..... $ 99

**HP RESILIET CARTS**

- 51626-A ..... $ 26
- 51625-C color ..... $ 29

## Disks PACKS of 50

- 3.5" DSHD DOS Fmtd ..39¢
- 3.5" DSHD Mac Fmtd ...49¢
- 3M DSHD Box/10 .... $ 8.69
- Sony DSHD Box/10 . $ 8.99

**SYQUEST CARTS EACH**

- SyQuest 44/88 MB . $ 54/59
- SyQuest 105 MB ..... $ 69
- SyQuest 270 MB ..... $ 79

## CD-ROM Drives

- Panasonic 2X-spin.... $ 129
- Mitsumi 2X-spin ..... $ 129
- **Generic 2X** int ..... $ 99
- **Quad 4X**-spin Int .... $ 259

**SOUND CARDS**

- MCD SndBstr-comp 16 $ 79
- SndBstr 16 SCSI-2..... call
- AWE Snd Blstr-32 ..... $ 259

## Backup Tapes

- 3M DC 2120..... $ 14
- 3M DC 2120X Qic 80.. $ 16
- 3M Magnus 1.2 GB..... $ 38
- Sony DG90M 4 mm DAT.. $ 14

**OPTICAL CARTS**

- 3.5" 128MB optical..... $ 30
- 5.25" 550/650MB opt... $ 69
- 5.25" 1.2/1.3GB opt..... $ 89

# 818-906-1132
# Fax 818-906-1488

HOURS Mon to Fri 9-6, Sat 10-5

**Convenient Financing Available!**

**CompuCal**

SALES · SERVICE NETWORK · TRAINING

14200 Ventura Blvd ● Sherman Oaks CA

VISA & MASTERCARD okay— *All prices reflect 3% cash discount*

**NOVELL NETWORK Specialists**

Installations Tech Support
Training Administration

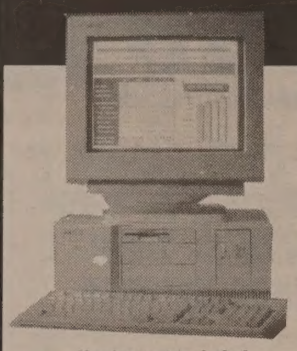
**TRADE-IN PROGRAMS AVAILABLE**

call for details

**dav tech Computer Center**

**(800) 447-3331**

## HP Vectra PC Series



Monitor not included

intel inside pentium

yes NetWare Tested and Approved

### HP Vectra VL2 4/50se

INTEL 486SX2-50 MHz
4-MB RAM, 210-MB IDE HD
3.5" Floppy Drive, DOS 6.2
Windows for Workgroups 3.11
Local Bus Video
HP Mouse & Keyboard

**3-YEAR WARRANTY (1-yr ON-SITE)**
**Excellent HP Quality in a value-priced PC**

**$995**

*DOC ID# 6348

### HP Vectra VL2 4/66 MM

INTEL 486DX2-66 MHz
8-MB RAM, 340-MB IDE HD
2X CD-ROM, 16-bit DSP Sound with SCSI-2, Integ. Speaker, Headphones
Local Bus Video 1-MB VRAM, Voyetra Softw., HP Mouse & Keyboard

**3-YEAR WARRANTY (1-yr ON-SITE)**
**Provides a complete audio & visual solution**

**$1795**

*DOC ID# 6361

### HP Vectra XU 5/90

INTEL Pentium 90 MHz
8-MB RAM, 540-MB IDE HD
Built-in SCSI-2 & Ethernet Interfaces
PCI Video 2-MB VRAM
HP Mouse & Keyboard

**3-YEAR WARRANTY (1-yr ON-SITE)**
**PC Magazine: EDITORS' CHOICE**
**BYTE Magazine: AWARD of EXCELLENCE**

**$2750**

*DOC ID# 6357

## HP OmniBook 600 NoteBook PC

3.8 lbs, Local Bus Video. 2 PCMCI Type 2 Slots
Ergonomic Popup Mouse, External 3.5" Floppy
Dual Scan 8.4" Screen, 3-Year World Wide Warr.

**HP OmniBook 600C 4/50** **$2395**
486DX2-50, 4-MB RAM, 170-MB HD

**HP OmniBook 600C 4/75** **$3390**
486DX4-75, 8-MB RAM, 260-MB HD

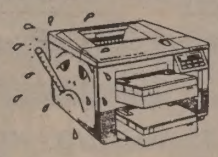
## HP FAX 900/950

Plain Paper InkJet
Copier Function
30-page ADF
300 dpi
Smoothing Tech.
10-page Memory
1-Year Exp. Exchg.

**$625**/**$750**

*DOC ID# 3306/9642 **After $75 Mail-In Rebate

*Take care of your Hewlett-Packard printers*



**Our "Hewlett-Packard Factory Authorized" technicians repair your printer in your office, or you can bring it to us.**

## TOSHIBA

*PCMCIA Modem and Memory Available*

| | |
|---|---|
| T1910/200 | $1199 |
| T1910CS/200 | $1635 |
| T1960CS/200 | $2065 |
| T1960CT/320 | $2585 |
| T2400CS/250 | $2285 |
| T2400CT/320 | $2979 |
| T3400CT/250 | $1850 |
| T4900CT/810 | $6695 |

## Tektronix

*THE STANDARD for desktop color printing*

**Phaser 140** $1540
360-dpi, 1-ppm,8-MB
Color Liquid InkJet

**Phaser 220i** $4690
600X300, 2-ppm,8-MB
Color Thermal Transfer

**Phaser 300i** $7690
300-dpi, 1-ppm,10-MB
Color Solid Ink

**Phaser 540** $7490
600-dpi, 17sec. pp,20-MB
Color Continous-Tone Laser

**Phaser 440** $6290
300-dpi Photo Qlty, 2min. pp
16-MB,Color Solid Ink

## Apple Macintosh

| | |
|---|---|
| PowerBook 150 4/120 | $1350 |
| PowerBook 520 4/160 | $1750 |
| PowerBook 520c 4/160 | $2220 |
| PowerBook 540c 4/320 | $3550 |
| PowerMac 6100/66 8/350 | $1650 |
| PowerMac 7100/80 8/700/CD | $2890 |
| PowerMac 8100/100 8/700 | $3250 |
| PowerMac 8100/110 16/2G/CD | $5780 |

**DAV-TECH Computer Center**

6314 Hollywood Blvd. (at Vine) Los Angeles, CA 90028

Prices are CASH discounted and are subject to change without notice.

(800) 447-3331
(213) 463-3001
Fax: (213) 469-7255

DAV-TECH Computer Center has been supplying Hewlett Packard products to Southern California since 1983.

We are "THE HP EXPERTS"

dav tech
Computer Center

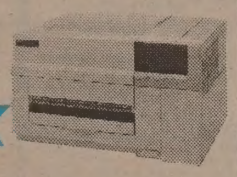
(800) 447-3331

# DAV-TECH
## Computer Center
...the EXPERTS!

HEWLETT PACKARD
Authorized Reseller

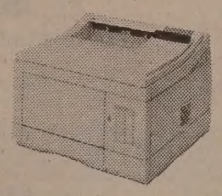
## HP LaserJet Printers

### HP Color LaserJet Printer
10/2 ppm Blk/Color
300 dpi with RET
8-MB Ram
1 Yr. On-Site Warr.



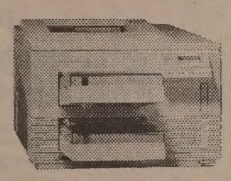
**IN STOCK**
*DOC ID# 1365

### HP LaserJet 4+ Printer
Up to 12 ppm
600 dpi
45 Scalable Fonts
2-MB Ram



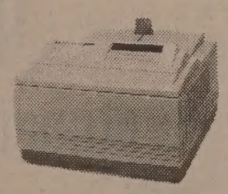
$ 1350 CASH
*DOC ID# 1365

### HP LaserJet 4Si Printer
Up to 17 ppm
600 dpi
2 Paper Trays
500 Sheets ea.



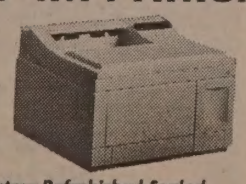
$ 2799
*DOC ID# 1322

### HP LaserJet 4V Printer
Up to 16 ppm
600 dpi
Up to 11" x 17"
4-MB Ram



$ 1890
*DOC ID# 1374

### HP LaserJet 4M Printer
8 ppm
600 dpi
Post Script
MAC & IBM



$ 1390
*DOC ID# 1321
*Factory Refurbished Sealed with 1-Year Warranty*

## HP DesignJet Plotters

### HP DesignJet 220 Plotter
Enhanced 600 dpi Res., 2-MB Ram, Cut Sheet
Auto Ser/Par Switch, 1-Year On-Site Warranty

D Size: HP C3187A *DOC ID# 5340
E Size: HP C3188A

### HP DesignJet 220 Plotter
Enhanced 600 dpi Res.
2-MB Ram
Cut Sheet
Auto Ser/Par Switch
1-Year On-Site Warr.

$ 2490 D Size
$ 3190 E Size
*DOC ID# 5340

### HP DesignJet 600 Plotter
Enhanced 600 dpi Res.
4-MB Ram
Cut Sheet & Roll
Auto Cutter
1-Year On-Site Warr.

$ 4190 D Size
$ 4990 E Size
*DOC ID# 5308

### HP DesignJet 650C Plotter
600 dpi B/W
300 dpi Color
4-MB Ram
Millions of Color
1-Year On-Site Warr.

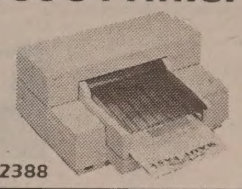
**IN STOCK**
*DOC ID# 5311

## HP DeskJet Printers

### HP DeskJet 1200C Printer
InkJet Color Printer
600 X 300 dpi
2-MB Ram
Millions of Colors

$ 999
*DOC ID# 2386

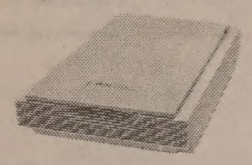
### HP DeskJet 560C Printer
B/W & Color
2 Ink Cartridges
300 X 600 dpi
3-Year Warranty



$ 475
*DOC ID# 2388

## HP Full Page Scanners

### HP ScanJet IIcx Scanner
1600 dpi Resolution
24-Bit Color
HP Copier Utility
Calera OCR Softw.



$ 740**
*DOC ID# 3306 **After $150 Mail-In Rebate*

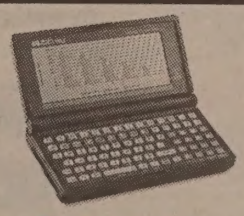
### HP ScanJet 3p Scanner
1200 dpi Resolution
8-Bit Gray Scale
SCSI Interface Kit
1-Year Exp. Exchg.

$ 475
*DOC ID# 3307

## HP 200LX PalmTop

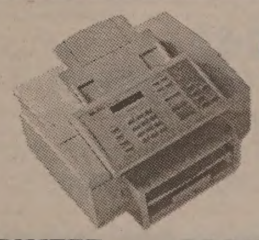
2-MB Ram
3-MB Rom

Built-in Software:
MS-DOS 5.0
Pocket Quicken
Lotus 123 R 4.2
Lotus cc:Mail
Data Comm
Scheduler
Aptmnt. Book
Phone Book



$ 650
FREE Leather Case
with Purchase ($40 Value)

## HP OfficeJet



"ALL IN ONE"
$ 777
*DOC ID# 9657

| PRINTER | COPIER | FAX |
|---|---|---|
| 600X300 dpi | Up to 99 Copies | 10 page ADF |
| DOS & WIN Comp. | Reduction Capab. | 24-page Memory |
| Optional MAC Int. | 40 Char. Display | 10-sec PP Transm. |

*FAX BACK: FOR MORE INFORMATION ON PRODUCTS CALL 800-333-1917 & ENTER CORRESPONDING DOC. ID#

DAV-TECH Computer Center
6314 Hollywood Blvd. (at Vine) Los Angeles, CA 90028
Free parking in rear with validation. Not responsible for errors.

(800) 447-3331
(213) 463-3001
Fax: (213) 469-7255

DAV-TECH Computer Center has been supplying Hewlett Packard products to Southern California since 1983.

We are "THE HP EXPERTS"

# Contents

# MicroTimes™

March 6, 1995 • Issue #134

COVER STORY


## 92
## Building SimEmpires
BY MARY EISENHART • COVER PHOTO: MICHAEL JAY

Maxis cofounder Jeff Braun on the educational and economic rewards of simulation software.

## News & Views

### 14
### Industry Insight
BY PAUL HOFFMAN

Intel/AMD Settle .....14
Internet Security Incident .....20
MicroTimes Stock Index .....23

### 26
### Realizable Fantasies
BY JIM WARREN

The need for secure cryptography in a post-Mitnick era.

### 32
### Preview: Fifth Conference On Computers, Freedom & Privacy

Coming to Burlingame in late March, this annual event brings together some of the leading luminaries of government, law enforcement, industry, and hackerdom.

### 242
### Dvorak's Last Column
BY JOHN C. DVORAK

Yet another attempt to render the Microsoft myth in dramatic form, with dubious results.

**MICRO Marketplace**
A Special Advertising Section for Bay Area Computer Buyers
**Starts On Page 84**

## Business Solutions

### 35
### Laptops
BY ED KAHN

The DataPen scanner; the Zeos Meridian 800.

### 43
### Telecommuting
BY ROBERT MOSKOWITZ

Self-management procedures for better productivity and less stress.

### 46
### Networking
BY PETER JOHN HARRISON

LAN-to-Internet connections, and how to make them.

### 52
### Small Office/Home Office
BY BIRRELL WALSH

Getting organized, for Mac and PC.

## Online Guide

### 59
### Internet
BY JOHN S. QUARTERMAN AND SMOOT CARL-MITCHELL

Revised estimates of how big the Internet is, and how fast it's growing.

### 67
### Web Page Listings

### 74
### Here Come The Knowbots
BY KEVIN SAVETZ

Net-based info-gathering just got easier.

## Features

### 105
### Preview: International Spectrum Business Computer Show

The biggest and longest-running all-business computer show in Southern California returns to the Anaheim Convention Center, March 28–30.

## Multimedia & Beyond

### 174
### Amiga
BY DOUGLAS J. NAKAKIHARA

Upbeat mood at Video Toaster Expo.

### 184
### New Forms Of Virtual Reality
BY TONY REVEAUX

QuickTime VR and Virtual Television expand the possibilities.

### 194
### Tools For Creating Believable Animation
BY PAMELA MASON

New plug-ins for 3D Studio Release 4.

# CREATIVE COMPUTERS

CREATIVE COMPUTERS, the Largest Apple® Macintosh® Dealer in California announces:

# MACINTOSH™ BEST BUYS!

All of the 2,500 Macintosh® items we stock in our stores are at mail-order prices!!

**90 Days same as cash FINANCING AVAILABLE**

**1994 MacInTax Federal Final Version**

$37.99 part# 68431

**TO ORDER VIA MAIL**

Call Creative Computers' MacMall 800-222-2808

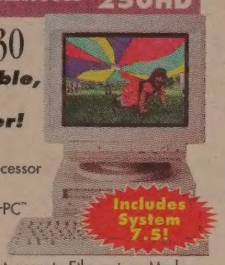
OPEN 24 HOURS!

Offer Code: D53MMT01

## Apple® Macintosh® 4MB 250HD

### Quadra® 630

**Most Affordable, Flexible Quadra® ever!**



- 68040 processor with integrated math coprocessor
- 66/33 MHz speed
- Upgradeable to PowerPC™
- Four expansion slots, including:

Communications slot that accepts Ethernet or Modem cards; LC PDS slot; Video slot for Apple® Multimedia Video System (NTSC/PAL/SECAM); and a slot for a cable-ready TV tuner card

- Optional internal AppleCD™ 300i Plus CD-ROM
- 1MB VRAM for built-in monitor support

Includes System 7.5!

Keyboard and monitor extra

$1079 part# 66657

## Apple® Macintosh® 8MB 250HD/CD

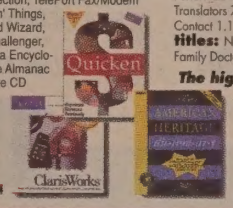
### Performa® 630CD

**Complete System**

- Performa® 630 8/250 CD-ROM (68LC040, 66/33MHz processor)
- Apple® Performa® Plus Color Display (.28 Dot Pitch)
- Apple® Standard keyboard
- Global VillageTeleport Fax/Modem (with Send Fax)
- '750 worth of **FREE** software!

Includes Monitor!

**Free software:** System 7.5 with Launcher, At Ease™ and Macintosh® PC Exchange™, Mac Gallery Clip Art, KidWorks,, ClarisWorks 2.1, Quicken 4, Click Art Performa® Collection, TelePort Fax/Modem Software, e•World™, MacLink Plus Translators, Thinkin' Things, The Writing Center, SpinDoctor CHallenge, Crossword Wizard, American Heritage Dictionary 3rd Edition, Spectre Challenger, **Free CD-Rom titles:** New Grolier's Multimedia Encyclopedia CD, 3D World Atlas CD, Wacky Jack's CD, Time Almanac CD, The Family Doctor CD, Dole Five a DAy Adventure CD




$1899 part# 67134

## Apple® Macintosh® 8MB 350HD/CD

### Performa® 6115

**Complete System**

Most Affordable PowerPC™ System Yet!

- Performa® 6115, 8/350/CD (PowerPC™ 601 RISC processor, 60MHz) • Apple® MultipleScan 15-inch Display (.28mm dot pitch) • Internal double-speed, tray loading CD-ROM drive • AppleDesign™ keyboard • 14.4 bps Teleport /Gold II Fax/Modem (with Send/Receive Fax)
- $750 worth of **FREE** software!

Includes Monitor!

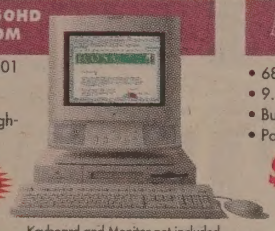
**Free software:** System 7.5 with Launcher, At Ease™ and Macintosh® PC Exchange™, ClarisWorks 2.1, Quicken 4, Mac Gallery Clip Art Treasure Pack, Click Art Performa® Collection, eWorld™, TelePort Fax/Modem Software, MacLink Plus/Easy Open Translators 7.5, American Heritage Dictionary 3rd Edition, Now Up-to-Date 2.1.1, Now Contact 1.1, Spectre Challenger 1.0.1, Spin Doctor Challenger 1.1. **Free CD-ROM titles:** New Grolier's Multimedia Encyclopedia, 1994 Time Almanac, 3D World Atlas, Family Doctor, Around the World in 80 Days, KidSoft CD.

***The high-performance of PowerPC™ with the added value of an all-inclusive solution in a single box!***

$2399 part# 67028

## Apple® Power Macintosh® 6100/66 8MB/350HD CD-ROM

- Power Macintosh™ 6100/66 , 8/250 CD-ROM (PowerPC™ 601 RISC™ processor, 66-MHz)
- Memory expandable to 72MB
- Internal expansion slot for one 7-inch NuBus™ expansion card; high-performance SCSI that supports up to seven SCSI devices



$1899 part# 67841

Run your applications up to 30% faster!

Keyboard and Monitor not included

## Apple® PowerBook® 540C 4MB/320HD

- 68LC040, 50/25 MHz Processor
- 9.5" dual-scan, passive matrix display (256 colors)
- Built-in, 33MHz Ethernet for exeptional speed
- PowerPC™ upgradeable

$3749 part# 66262

Includes FREE PowerBook® Mobility Bundle!

## Apple® Power Macintosh® 7100/80 8MB/500HD

- Power Macintosh™7100/80, 8/500 (PowerPC™ RISC™ processor, 80MHZ)
- Memory expandable to 136MB
- Internal expansion slots for three full size NuBus™ expansion cards; high-performance SCSI that supports up to seven SCSI devices

$2729 part# 68201

Run your applications up to 40% faster!

Keyboard and Monitor not included

## Sony Speaker and Monitor Combination

- 15-inch, SONY Multiscan 15sf display, Trinitron tube.
- 1280x1024 pixels resolution at 60Hz
- SONY CSS-B100 Computer Speaker System that delivers remarkably rich sound
- Magnetic shielding limits interference

SONY® SONY Multiscan 15 Display $449 part# 65159

SONY CSS-B100 speakers $98.99 part# 65774

HOT ROD Your Multimedia!

## Magnavox 14" Color Monitor

- Model CM 2080
- 640x480 resolution
- Super fine .29 dot pitch • 66.7 Hz vertical refresh rate
- Meets ELF/ VLF low emission guide-lines
- Least expensive Macintosh® monitor available!

$269.99 part# 61905

## Apple® Macintosh® System 7.5

NEW!

It's powerful, it's easy to use— it's the new operating system for your Macintosh®!

$98.99 part# 65948

## Apple® Color StyleWriter® 2400

- Thermal ink-jet
- 360 dpi • 3 ppm /gray-scale, .3 ppm /color • 64 scalable TrueType™ fonts
- Two separate ink cartridges • Waterfast ink
- EtherTalk and TokenTalk support via ColorShare™

Includes 2 Ink cart., Ink Tanks, Color Media part# 66644 $449

## Apple® Newton® MessagePad™ 100

***The most affordable member of the Newton® family.***

*The Apple® Newton® MessagePad™ 100 personal digital assistant helps you manage information, stay in touch with people, and exchange information with your computer.*

It runs a wide range of useful software, and it can connect with your Apple® Macintosh® computer or Windows-based PC (with the optional Newton® Connection Kit). Powerful handwriting-recognition capabilities for both printed and cursive writing allow the MessagePad™ to either transfer your notes into text letter by letter, word by word, or save them in handwritten form. It can help you organize ideas, take notes, and make sketches. The NewtonMail™ feature lets you stay in touch with other Newton® MessagePad™ users, and with Macintosh® and Windows-based computer users with an optional modem.

Includes QuickFigure Pro FREE!!

- *640K RAM, 4MB ROM • LocalTalk® • Prints to Apple® LaserWriter® and Apple® StyleWriter® printers with serial cable, or to parallel printers using Newton® Print pack • Can exchange data with an Apple® Macintosh® computer or PC • Supports Group 3 fax machines • Wireless message capability • Extended battery life • Enhanced user memory • Includes QuickFigure Pro Software Free!*

$199.99 part# 68703

## Connectix RAM Doubler 1.5

Doubles your RAM without complicated installation or expensive hardware. It gives your Mac™ twice as much memory to open applications. Just double click to double your RAM. RAM Doubler is compatible with all applications. Requires Macintosh® II or better, 4MB of RAM. *"Web Macmall® Word, Microsoft® Excel or Macintosh® computer purchase*

Accelerated for Power Macintosh™

$49.99* part# 66970

## Best Data 14.4 Data/Fax Modem

Ultra fast fax/modem •14,400 bps full duplex data •14, 000 bps send/ receive fax • V.32bis, V.42bis, MNP 2.5 support for data compression and error correction.

part# 67174 $88.99

## Apple® 340MB External Hard Drive

- Front panel power-on switch
- Simple SCSI ID check or change under a front mounted pop-up panel
- Complete set of cables, operating software and terminator
- Advanced 3-1/2 drive technology provides fast data access

$374.99 part# 66395

## Double Speed CD-ROM Drive

***Double Speed External CD-ROM Drive***

- Exceptional Speed and Dependability
- Space Saving Design
- Toll Free Support and 2 Year Warranty

$179.99 part# 68028

## WACOM Art Pad 4" x 5"

Its thin, contoured design lets your hand glide easily on and off the tablet. Ideal for everyday graphics and natural *"touch and move"* screen navigation.

Includes cordless/ batteryless UltraPen part# 67146 $148.99

## VividKEY Extended Keyboard

Provides Macintosh® users with a superior extended keyboard, top notch ALPS mechanical keyswitches and 15 macro-storage keys. A pleasure to use.

Why pay $149 at our competitors? $59.99 part# 67595

## DOS Compatibility Card for the Power Macintosh® 6100

For those customers who desire a cross-platform hardware solution, the DOS Compatibility Card will offer mainstream '486 DX2/66 performance and Soundblaster support for multimedia usage, making this a powerful dual processor system.

$699.99 part# 68208

**SAN DIEGO**
8841 Clairemont Mesa Blvd.
Kearny Mesa
619-467-4700




**SOUTH BAY**
4453 Redondo Beach Blvd.
Lawndale
310-542-2292




**SANTA MONICA**
1505 Wilshire Blvd.
Santa Monica
310-394-7779




**ORANGE COUNTY**
23710 El Toro Road, Ste F-1
Lake Forest / El Toro
714-859-3300




Authorized Catalog Reseller

**SOUTH BAY AND SANTA MONICA**
10-7pm MON-SAT
11-6pm SUN

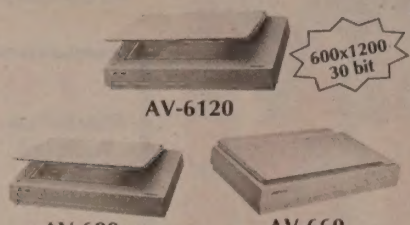
**ORANGE COUNTY**
10-7pm MON-SAT
Closed SUNDAYS

**SAN DIEGO**
9-7pm MON-FRI
10-7pm SAT
11-6pm SUN

Apple, the Apple logo, LaserWriter, StyleWriter, Macintosh Quadra, Mac & Macintosh are registered trademarks of Apple Computer, Inc. PostScript is a trademark of Adobe Systems Inc. MS-DOS is a registered trademark of Microsoft, Newton, Message Pad, System 7, LocalTalk, GeoPort & Power Macintosh are trademarks of Apple Computer, Inc. Trinitron is a trademark of Sony. NuBus is a trademark of Texas Instruments. PowerPC is a trademark of IBM Corp. Classic is a trademark licensed to Apple Computer, Inc. Prices and specifications subject to change without notice. Limited to stock on hand. IMPORTANT: While we do our best to check errors, mistakes may occur – Call to verify pricing.

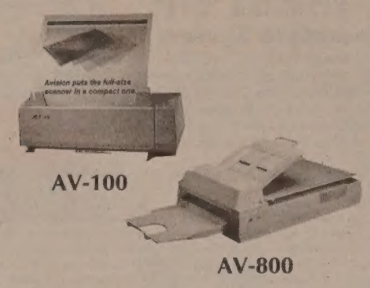
## Color Scanner Factory Outlet

***Flatbed Color Scanners - PC & MAC. customers***




**Features & Options:**
- 300, 400, 600 DPI optical resolution
- 4800 or 6400 DPI max. resolution
- Letter or legal size paper
- TWAIN compliant
- SCSI or PC interface
- Slide kit free for AV6120
- Prices start at $459 or more
- Free IPhotoplus software
- Optional - Photoshop 3.0 full version

***Document Imaging Scanners - PC customers***




**Features & Options:**
- 256 levels gray scale
- 300 x 600 optical resolution
- Letter or legal size paper
- TWAIN compliant
- Direct PC interface
- 2400 DPI max. resolution
- Ideal for school, goverment, and small business.
- Prices start at $459 or more
- Free OCR software

AV AVISION LABS INC.

48521 Warm Springs Blvd.,
Suite 312, Fremont, CA 94539
Phone: 510-440-8785
Fax: 510-440-8337

***Call AVL at 510-440-8785***

VAR & Dealers Welcome

IMAGING EDITORS' CHOICE

# DON'T BUY!!!
# SMARTRENT
## *for*
# LESS

ADVANTAGES OF RENTING VERSUS BUYING OR LEASING:

1. Fast changing technology.
2. Full deduction of your monthly rental payments.
3. We pay equipment property tax, you don't.
4. Free and prompt service, delivery and pickup.
5. No long term commitments to the outdated equipment.
6. No upfront capital expense.

| | |
|---|---|
| HP LaserJet 4 Plus Printers, 600dpi, 12 pages per minute | $75.00/mo. |
| HP LaserJet 4M Plus Printers, 600dpi, 12 pages per minute | $125.00/mo. |
| Apple Quadra 605 Computers, 8MB RAM, 160MB HD | $95.00/mo. |
| Apple Quadra 630 Computers, 8MB RAM, 250MB HD | $125.00/mo. |
| Apple Power 6100/60 Computers, 8MB RAM, 250MB HD | $145.00/mo. |
| Apple Power 7100/66 Computers, 8MB RAM, 250MB HD | $195.00/mo. |
| Apple PowerBook 520 Computers, 8MB RAM, 160MB HD | $165.00/mo. |
| Apple PowerBook 520C Color Computers, 8MB RAM, 160MB RAM | $195.00/mo. |
| Apple PowerBook 540 Computers, 8MB RAM, 320MB HD | $295.00/mo. |
| Compaq 486 DX2/50MHz Computers, 8MB RAM, 270MB HD | $95.00/mo. |
| AMCO 486DX2/66MHz Computers, 8MB RAM, 420MB HD | $95.00/mo. |
| Toshiba Laptop T1910CS Color Computers, 8MB RAM, 200MB HD | $175.00/mo. |

Other Brands And Configurations Are Available. Rentals Are Month to Month. No Security Deposit.
FREE: Delivery, Installation, Service and Pick-Up. If you RENT NOW & pay more, switch to us and SAVE.
RENT and use the latest technologies - ALWAYS.

**CALL NOW: 213-937-6700**

**M-F, 8AM-5PM**

**AMCO Rents and SALES, INC. • 600 N. LaBrea, L.A. 90036**



Contents

# MICROTIMES

**March 6, 1995 #134**


## Product Spotlight

**120**
**Product Updates**

**120**
**New Products**


**CD-ROMs**

Novell PerfectOffice 3.0 . . . . . 120
GreenDesk For Windows . . . . . 168

**PC Hardware**

Anthurium Protea 166 . . . . . 168
Digital's Starion . . . . . 168

**Printers/Scanners**

UMAX BizCard Reader . . . . . 168

**Games**

ConcertWare 1.5 . . . . . 168
SimTown . . . . . 170


**Reviews**


**Macintosh Software**

Maxima 3.0 . . . . . 170
SimFarm . . . . . 206

**PC Software**

MIDI Renderer . . . . . 206
Procomm Plus For Windows . . . . . 208


## Resources

**216**
**Calendar Of Events**


Documation '95 . . . . . 216
American Computer Mega Show . . . . . 216
Computer Marketplace . . . . . 216


**220**
**User Group Network**

**228**
**Classifieds**

**237**
**Index Of Advertisers By City**

**240**
**Index Of Advertisers**

# WinBook XP

Choose the pointing device that works best for you:

## TECHNICAL SPECIFICATIONS

- SL-ENHANCED INTEL 486 DX4-75MHZ OR 486 DX4-100MHZ.
- 5.9 LBS. DUAL-SCAN COLOR OR 6.1 LBS. OPTIONAL ACTIVE MATRIX COLOR
- DIMENSIONS: 11.3" X 8.5" X 1.7"
- 4MB, 8MB OR 16MB RAM (EXPANDABLE UP TO 32MB)
- 3.5" 1.44MB DISKETTE DRIVE
- REMOVABLE 260 TO 810 HDD
- VGA DUAL-SCAN COLOR OR OPTIONAL ACTIVE MATRIX. MONOCHROME UNITS ALSO AVAILABLE
- 10-CELL NIMH BATTERY & AC PACK
- SUSPEND/RESUME FEATURE
- TWO TYPE II OR ONE TYPE III PCMCIA SLOT
- INTEGRATED DUAL-BUTTON POINTING STICK, OPTIONAL DUAL-BUTTON 19MM TRACK-BALL OR OPTIONAL DUAL-BUTTON TOUCHPAD
- PARALLEL, SERIAL AND PS/2 PORTS
- 1MB VIDEO MEMORY WITH EXTERNAL VGA PORT
- LCD FUNCTION INDICATOR PANEL
- 14.4 SEND/RECEIVE FAX/VOICE/ DATA MODEM OPTIONAL
- INTERNAL AUDIO OPTIONAL
- DOCKING STATION OPTIONAL

# AT $1999, IT'S THE ONLY SPEEDING TICKET YOU'LL ENJOY PAYING.

**$1999** .....
- Intel 486 DX4-100MHz
- 10.3" dual-scan color display
- 4MB RAM/260MB HD

**$4199** .....
- Intel 486 DX4-100MHz
- Active matrix color display
- 16MB RAM/810MB HD
- 14.4 Fax Modem
- DOS and Windows

**100MHz $1999**

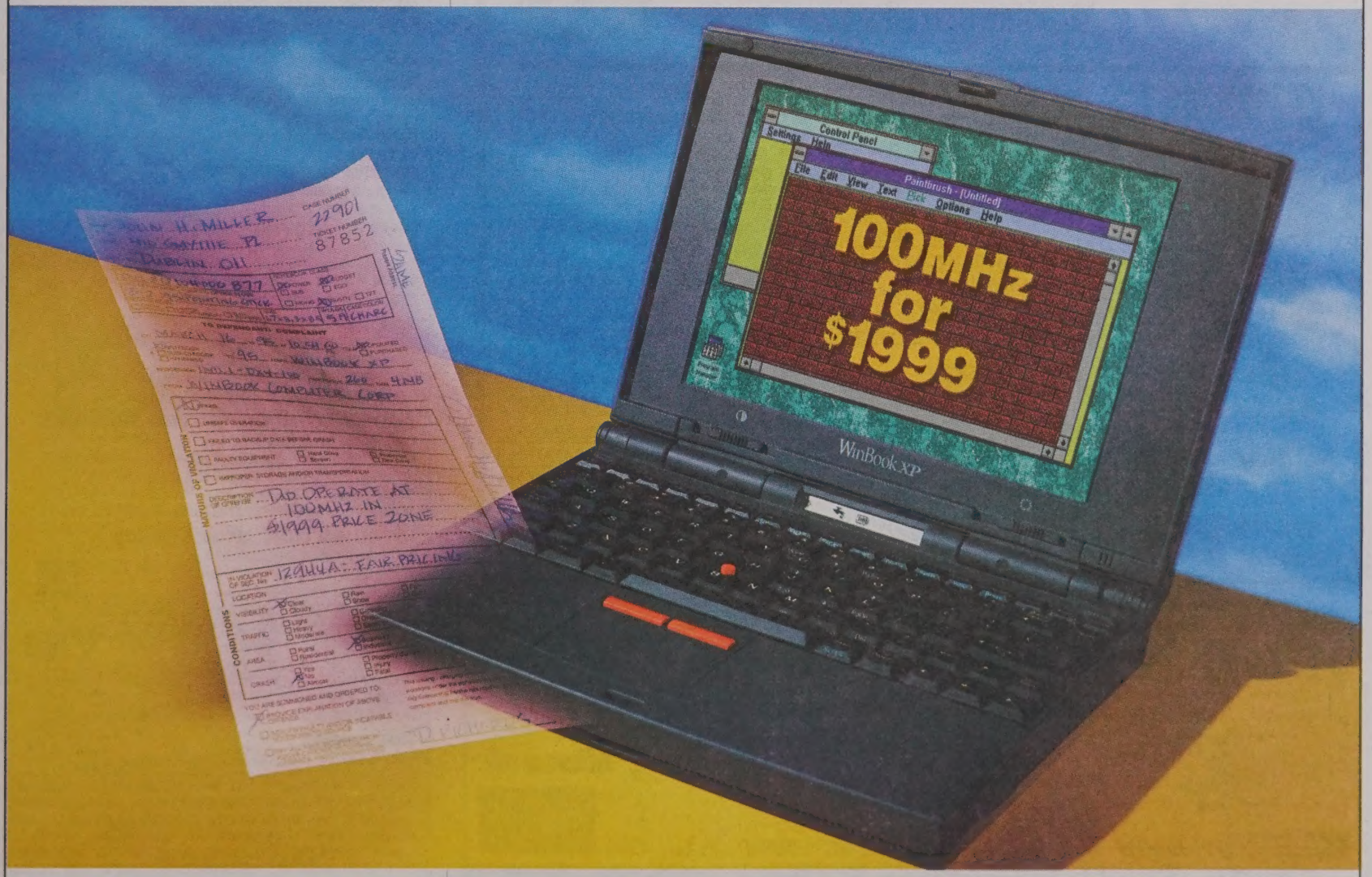
$$ Comparable savings on all other WinBook XPs—from our base models to notebooks for the power user. For current pricing and configurations, call 1-800-468-9785.

PC MAGAZINE EDITORS' CHOICE
August 1994, WinBook XP DX2/50 4/260 Monochrome

**PC Laptop**
Most Improved Portable
January 1995, WinBook XP

PC WORLD BEST BUY
February 1995, WinBook XP DX2/50 8/255 Monochrome

PC WORLD BEST BUY
February 1995, WinBook XP DX4/75 8/125 Dual-scan color




intel inside
We use only genuine Intel microprocessors in our quality computer systems.

WESTERN DIGITAL ROCKETCHIP VIDEO GRAPHICS ACCELERATION

WinBook® COMPUTER CORPORATION
*a subsidiary of Micro Electronics, Inc.*

**Call us today, toll-free**
**1-800-468-9785**
Monday-Friday, 8am-9pm EST • Saturday, 9am-4pm
Use your VISA, Discover Card, MasterCard, personal check or P.O. with credit approval. U.S. sales only. 30-day unconditional money-back guarantee from date of purchase.

©1995 WinBook Computer Corporation. All rights reserved. WinBook is a registered trademark of Micro Electronics, Inc. The Intel Inside logo is a trademark of the Intel Corporation. All other trademarks and registered trademarks are property of their respective corporations. All prices and specifications are subject to change without notice or obligation. Prices do not include shipping.

PCW WAREHOUSE

## Nationwide's TOP 5 leading computer stores

*Authorized Service Center for Compaq, IBM, HP,Epson,Panasonic..*

**COMPAQ**

**Presario**

520TVCD...$1595-4/420mb HDD w/TV

920CDTV...$1895..8/420mb HDD w/TV

924CDS.$1795-8/520mb w/CD-ROM

**IBM** PS/1 486dx2-50...$995
4/340 HDD Desk top case

**NEC** Pentium-90...$2695
8mb /560 HDD Tower case

**EPSON** 486dx2-66...$1295
4 /560 HDD CD-Rom Desk top case

PowerMac 610/60....$1395

**Apple** 60MHz 8mb /160mb HDD
Performa 630CD ....$1895

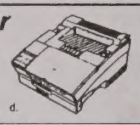
**Pentium-90...$1895**

Intel CPU P-586-90
8mb/560mb HDD 1.44FDD
PCI 64 bit s SVGA & IDE
Mid-Tower case cooling Fan

586--66Mhz ....$1495

*EPSON Laser 6PPM 512k*

**$349**



**Upgrade**

Intel CPU 486dx2-66...$179
Upgrade to 486dx2-66...$299
to Pentium 586-66 from..$595
to Pentium 586-90 from..$995

**HDD/FDD**

Maxtor 1Gmb...$349
Maxtor 850 ..$259 Maxtor 540..$199
(Gen) 560mb.$179 420mb (12ms) $159
NEC 1.44 mb FDD ..$29 1.2mb ..$39

**CD-ROM**

Mitsumi 4xSP... $179
Teac 4xSP From..$189
Toshiba 4xSp...$279
NEC 4xSp 501...$365

**NEC**

3FGe..$389
4FGe..$429
5FGe..$739

(Renew)- Special price w/1year Warranty

**Panasonic** C1491 NI...$239
C1791E(digital).$749

**SONY** 1425(14")..$329
151sf..$429
17sf ...$825

Kenitec 14' SVGA .28 mGreen .. $ 185
Kenitec 15' L-R ... $279 17'...$549

**Toshiba**

*"Low price Guaranteed"*

T-2400CT * 486dx2-50 4/250..$2595
T-4850CT 486dx4-75 8/500mb HDD
Sound card built-in Active ..$4695

Powerbook 520 .. $ 2095
Powerbook 540C....$3695

**NEC** 486sx-33S C 4/210..$1495
486dx2-50V 4/250mb .$2295
486dx2-50V 4/340mb Active..$2995
486dx2-50V 4/540mb Avtive...$3295
486dx4-75M 4/340mb Active ..$3995
486dx4-100 8/500mb/H-Active..$4495
Pentium 586-75 8/500mb Active.$4995

**EPSON** Action 650C 10'4 Screen
486dx2-50C 4/260..$1845
A-650 486dx2-50....$1395

**COMPAQ** Aero 4-33C 4/170...$1595
Countura 410 C ....$2295
Contura 410CX Active...$2895
LTE Elite 4/75 8/340 Active...$4795

**Canon** NoteJet 486slc2-50 4/260
w/Printer Color....$2295

All prices base on cash discount,Availability & Prices are subject to change without notice.Available only at PCWarehouse S.CA.

TempleCity:818-285-6663
5817 Rosemead Blvd.
(At Las Tunas )

Encino: 818-907-6476
15617 Ventura Blvd.
(101 at Haskell)

Gardena: 310-516-2098
1355 W. 190th St.
(405 at Normandie)

Santa Fe Springs:
310-926-7363
13340 Firestone Blvd.

City of Industry:
818-913-7121.
(17405, E.Gale Ave)

Thousand Oaks: 805-379-0181
3835R Thousand Oaks Blvd.
(Westlake Blvd., next to Ralphs)

**Finacial Available**
**90 days Same as cash**

## Dunwell

*Dunwell Computer* *All brand names you need!*

*(All wholesale price & Low price Guaranteed)*

**Panasonic** Office Automation
P1150..$119
P2130..$169*
P2135..$189*
KX-P3123/3124..$240/319

Kxp-3624..$369
P4400...$369*
P5400...$499
KXP-100 3 in-1..$755

**CITIZEN**
GSX-220/230..$159/199

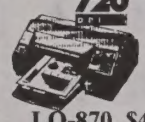
**SHARP**
JX-9460-PS.$675
6PPM,600DPI
2MB, Postscript

**hp**
DJ--320..$285
DJ-540...$275
DJ560C...$450
DJ-1200C..$950 OfficeJet.$755
4L...$490 4P..$905 4+..$1345
4M+.$1835 4V.$1845 4MV.$2645
Scanjet 3P..$469 IIcx..$739*
4SI, Color Laser printe....Call

**Canon**

BJ-10sx...$249
BJ-200ex....$229
BJ-230...$375(wide)
BJC-4000..$349 BJC-600e..$445

**EPSON**



Action 2250...$99
LX-300....$159
LQ-570+.....$235
FX-870...$279
FX-1170....$365
LQ-1070+.$365
LQ-870..$459 LQ-1170.$599
Stylus 400..$199 800+.$219
Stylus Color 720 DPI..$499
Action11 /15 /1600.$379/459/755
DFX-5000+..$1345 8000..$2295

**IBM** Ink J/color.$249/325
4037E/39..$625/1095

**Lexmark** 4039-12R+...$1195

*DUWELL*
*Wholesale Division*

(818) 913-8686 17405 A-1, E.Gale Ave City of Industry
(818) 906-9691 15617 Ventura Blvd ENCINO
(310) 926-0172/516-0413 13340 Firestone Blvd Santa Fe Springs

*Price After Rebate

# HIGH SPEED COMMUNICATIONS

Dial-Up - ISDN - 56K - T1 - T3

NOW INSTALLING: Access to the INFORMATION SUPER HIGHWAY!!!

Routers - Bridges - CSU - DSU - Channel Bank - Multiplexors...
Video Conferencing - Imaging - RAS - PPP - Slip...
Long Distance Switched or Dedicated...

Microsoft

MICROSOFT WINDOWS READY-TO-RUN

CASE LOGIC *PictureTel Motorola IBM ISDN*TEK AT&T ZyXel Cisco*

**WHY ONLY 28,800? ISDN = 56,400 ERROR FREE!!**

HACKER ELECTRONICS & COMPUTERS

(818) 882-7980
21010 DEVONSHIRE
CHATSWORTH, CA



BAM ACCESS TO MARKETS · BAM MEDIA · BAM ACCESS TO MARKETS

California's Computer Magazine

# MICROTIMES

**EDITOR-IN-CHIEF**
Dennis Erokan

**PUBLISHER**
Chuck Stanley

**ASSOCIATE PUBLISHER**
Amy Marson

**EDITORIAL 510-934-3700**
**email: Microx@well.sf.ca.us**
**EDITOR** Mary Eisenhart
**ASSOCIATE EDITOR** Michael Robin
**NEWS EDITOR** Paul Hoffman
**ART DIRECTOR** Monika Lukenbill
**SENIOR DESIGNER** Rick Colby
**CONTRIBUTING EDITORS** Lenny Bailes, John Perry Barlow, Smoot Carl-Mitchell, Jennifer Robin Cherniss, John C. Dvorak, Jonathan E., Bernett Falk, Mitsu Hadeishi, Peter John Harrison, Ed Kahn, Matthew Leeds, David Morgenstern, Robert Moskowitz, Douglas J. Nakakihara, Fabian Pascal, John S. Quarterman, Tony Reveaux, David A. Simon, CPA, Birrell Walsh, Jim Warren, John Wolcott
**CONTRIBUTING WRITERS** Mikael Blaisdell, Anna Couey, John Cowan, Rich Grace, Fred Haslam, Fred Lieberman, Woody Liswood, Judy Malloy, Pamela Mason, Kevin Savetz
**EDITORIAL ASSISTANT** John Downen
**CONTRIBUTING PHOTOGRAPHERS** Michael Jay, Anne Knudsen, Susana Millman, Paul Winternitz

**ADVERTISING 213-851-8600**
**SALES MANAGER (SO. CAL.)** Cynthia Lapporte
**SENIOR ACCOUNT DIRECTOR (NO. CAL.)** Barry Green
**ACCOUNT EXECUTIVES** Marty Gillow, Tracy Longo, Ken Marson, Herb Mendelsohn, Debra Siegel, Chloe Vezo
**MARKETING MANAGER** Carolyn Guerrero
**CLASSIFIED & SUBSCRIPTION MANAGER (NO. CAL.)** Jennifer Kosta
**ADVERTISING SERVICES ASSISTANT**
Robert Judin (Northern California)
Michelle Rosendin (Southern California)
**CO-OP MANAGER** Nick Alvarez

**PRODUCTION**
**GROUP PRODUCTION MANAGER** Mary Beth DeSantis
**GRAPHIC ARTS MANAGER** Gary Sparks
**SENIOR PRODUCTION ASSISTANT** Matt Matuska
**TRAFFIC ASSISTANT** Beth Bartels Tarder
**PRODUCTION ASSISTANT** Caroline Keller
**ASSOCIATE DESIGNERS** Eleanor Carag, Paul Dorian, Michelle Logan, Tracy McCormack
**GRAPHIC ARTS STAFF** Randy Atwood, Jennifer Bagwell, Donna Bogener, Linda Burkard, London Cammack, Peter Kowalesyn, Miranda Liss, Michelle Roberts, Lisa Spencer
**DIGITAL IMAGING** Jesse Coleman
**PROOFREADERS** Becky Forsyth, Tim Regan

**ADMINISTRATION**
**HUMAN RESOURCES DIRECTOR** Erica Stein-Oakley
**N.C. OFFICE MANAGER** Christine Garcia
**N.C. ADMINISTRATIVE ASSISTANTS** Leta Jesch, Kerri Neely
**L. A. ADMINISTRATIVE ASSISTANT** Jacqui Tavis

**ACCOUNTING/COMPUTER SERVICES**
**CONTROLLER** Linda May
**ACCOUNTING** Joaquin Arellano, Richard Cook, Vickie Liu, Brian Murray, Bonnie Peterson, Sara Tassione
**CREDIT MANAGER** Doug Morgan
**NETWORK/COMPUTER SUPPORT** Jason Boatman, John Dito

**DISTRIBUTION 213-851-8600**
**DISTRIBUTION MANAGER** John Erokan
**ASSISTANT MANAGER/LA** Art Holland
**DISTRIBUTION ASSISTANTS** Kenny Priest
**DISTRIBUTION CLERKS** Laney Erokan, Jesse Sullivan
**FIELD COORDINATORS** Roe Eyth, Frank Grygus
**DISTRIBUTION** Dennis Anderson, John Clefstad, Mike Jett, Don Karr, Juan Lau, Jac Michanovic, Robbie Myers, Reliable Circulation, John Dimas Rezendes, Bill Rivera, SPS, Wilfredo Villarroel
**PUBLICATIONS** *BAM , Drive!, Home Improvement & Design*

**FOUNDERS**
Dennis Erokan, Don Hamilton, Pat Hamilton

This Vol. 11 No. 3 March 6, 1995, Whole No. 134. MicroTimes, California's Computer Magazine, is published by BAM Media, Inc., 3470 Buskirk Ave., Pleasant Hill, CA 94523. Phone Advertising Office (510)934-3700. Fax (510)934-7351. email Microx@well.sf.ca.us Los Angeles Office, 6767 Forest Lawn Drive, Suite 110, Los Angeles, CA 90068. Phone (213) 851-8600. Fax (213)851-8303. San Jose Office, 36 Harold Ave., Suite 2, San Jose, CA 95117. Phone (408) 244-4400. Fax (408) 248-4552. Anaheim Office, 801 East Katella Ave., Suite #210, Anaheim, CA 92805. Phone (714) 939-2809. Fax (714)978-6135. MicroTimes™ is © 1995 by BAM Media, Inc. Subscription rates: 14 issues, U.S.: 4th Class $35 (Allow 3 to 4 weeks for delivery), 1st Class $65 (Allow 1 to 2 weeks for delivery). MEXICO & CANADA: Surface Mail $50 (Allow 4 weeks for delivery). Air Mail $75 (Allow 1 week for delivery). OVERSEAS: Surface Mail $50 (Allow 6-10 weeks for delivery), Air Mail $178 (Allow 1 week for delivery). To receive sample issues, please send $5 ($6 for overseas) to cover postage costs. Back issues are $6 each. All rights reserved. Reproduction in whole or in part without permission of Publisher is strictly prohibited. The staff and management of MicroTimes do not advocate or encourage the use of any product or service adve tised herein for illegal purposes.

# WHOLESALE TO THE PUBLIC

**FREE MOUSE & SOFTWARE w/COMPLETE SYSTEM PURCHASE:**
CLIENT MANAGER • DAILY SCHEDULE • THINGS TO DO • FINANCIAL MANAGER • EASY ACCOUNTING (A/R, A/P, G/L...) !

## ECONOMY SYSTEM

- Mini-Tower Case
- 1MB RAM
- 280MB Hard Disk (500MB w/Double Space)
- IDE/I/O Controller
- 1.44MB Floppy Drive
- VGA Graphic Card
- 14" SVGA Monitor .39mm
- 101 Enhanced Keyboard
- Lifetime Labor Warranty
- 1 Year Warranty
- 72-Hour Burn-In Test

386DX-40MHz $525
(Upgradable to VESA 486SX/DX)
486DLC-40MHz $553
Intel 486SX2-50MHz $595
486DX2-50MHz $605
486DX2-66MHz $645

**SPECIAL**
**TO BEAT ALL SPECIALS!**
• THIS MONTH ONLY •
LIMITED QUANTITY!!
486DX2-50MHz
VESA LOCAL BUS
$795

## VESA LOCAL BUS SYSTEM

- Mini-Tower Case
- 256K Cache Memory
- 4MB RAM
- 420MB Hard Disk
- VESA IDE/I/O Controller
- 1.44MB Floppy Drive
- 1MB VESA SVGA Card
- 14" SVGA Monitor .28mm
- 101 Enhanced Keyboard
- Lifetime Labor Warranty
- 1 Year Warranty Parts
- 72 Hour Burn-In Test

486DX2-66MHz $835
IBM 486SLC2-66MHz $775
486DX2-80MHz $885
486DX4-100MHz $995
→ Pentium 60 MHz $1085
→ Pentium 66 MHz $1125
Pentium PCI 90 MHz $1395

| 386SX-40MHz | Intel 486SX2 50MHz | 486DX2-50MHz 256K | PENTIUM 90MHz |
|---|---|---|---|
| $170 | $265 | $275 | $855 |

Systems Include: • Super Mini Tower Case • IMB RAM • 1.44MB Floppy Drive • Super IDE/I/O Controller (1:1) • 2 Serial/1 Parallel/1 Game Port • Real Time Clock and Calendar • 101 Enhanced Keyboard • Lifetime Labor Warranty • 1 Year Warranty Parts • 72-Hour Burn-in Test

| 386DX-40MHz 128K | 486SLC2-66MHz IBM w/Math-Co | 486DX2-66MHz 256K | PENTIUM 66MHz |
|---|---|---|---|
| $195 | $245 | $315 | $580 |
| **486DLC-40MHz 128K** | **486SLC-75MHz IBM w/Math-Co** | **486DX4-100MHz 256K** | **PENTIUM 60MHz** |
| $225 | $325 | $455 | $540 |

## INTEL BUS SYSTEM

- Mini-Tower Case
- 256K Cache Memory
- 8MB RAM
- 540MB Hard Disk
- 1.44 Floppy Drive
- **ATi Mach 32 VLB Accelerator (for 486 VLB) (1280x1024, 1MB Upgradable to 2MB**
- **ATi Mach 32 PCI 2MB Accelerator (for Pentium) (1280x1024, 16M True Color)**
- 15" Flat SVGA Non-Interlaced Monitor
- Double Speed Muti-Media Package (for 486 VLB)
- Quad Speed Multi-Media Package (for Pentium)
- 101 Enhanced Keyboard
- 3-Button MS Compatible Mouse
- Lifetime Labor Warranty
- 1 Year Parts Warranty
- 72-Hour Burn-In Test

486VLB DX2-50MHz $1395
486VLB DX2-66MHz $1365
486VLB DX4-100MHz $1465
Pentium 60MHz $1665
Pentium 66MHz $1695
Pentium 90MHz $1995

## MONITOR & GRAPHIC CARDS

| | |
|---|---|
| 14" Mono Monitor | $75 |
| 14" Mono VGA | $110 |
| 14" Color (.39) | $180 |
| SVGA 14" (.28) Non-Interlaced | $185 |
| SVGA 15" (.28) Non-Interlaced | $275 |
| SVGA 17" Non-Interlaced (1280x1024) | $525 |
| ATi Mach 32 PCI (2MB) BEST PRICE! | $124 |
| ATi Mach 32 VLB (1MB) BEST PRICE! | $89 |

## MODEM & PARTS

| | |
|---|---|
| Mouse | $7 |
| (Sony, Mitsumi, Panasonic) CD ROM Double Speed | $112 |
| FAX MODEM (9600 BAUD) | $29 |
| 250 Tape Drive | $139 |
| 250 Tape | $10 |
| 14400 FAX/DATA MODEM | $49 |
| 28800 FAX/DATA MODEM | $139 |
| 486DX-33/66MHzVLB Board | $79 |
| Pentium 60/66MHz PCI Board | $180 |
| Screen Filter | $24 |

## CD TITLES

| | |
|---|---|
| 13 CD Titles (Encyclopedia, Chess Master, Animals...) | $35 |
| Family Pack (World Atlas, Animals, Oceans Below,Kids Can Read...) | $40 |
| Shareware CD Titles (Window Games, Clip Art, Fonts, Business Titles...) | $5 |
| Adult CD Titles | $12 |

## UPGRADES

| | |
|---|---|
| Memory Upgrade Prices | CALL |
| 1.2M FDD | $36 |
| 1.44M FDD | $29 |
| **486DX2-66MHz Upgrade (w/486DX-33MHz Trade-In)** | $119 |

## HARD DISK DRIVES

| | |
|---|---|
| 210MB IDE | $139 |
| 280MB IDE | $148 |
| 340MB IDE | $152 |
| 420MB IDE | $165 |
| 540 MB IDE | $178 |
| 720 MB IDE | $235 |
| 850 MB IDE | $255 |
| 1.0 GIG IDE | $350 |
| 1.7 GIG IDE | $495 |
| 1.08 GIG SCSI 2 | $465 |
| 2.0 GIG SCSI 2 | CALL |

## NOTEBOOKS

**486SLC2-50MHz**
- 4MB RAM
- 120MB HDD
- Mono LCD

$950

**486DX-33MHz**
- 4MB RAM
- 250MB HDD
- Dual Scan Color
- Built-in Trackball
- PCMCIA
- Carrying Case

$2050
Add $800 for Active Color

**486DX2-66MHz**
- 4MB RAM
- 250MB HDD
- Dual Scan Color
- Built-in Trackball
- PCMCIA
- Carrying Case

$2100
Add $850 for Active Color

## MULTIMEDIA SPECIALS

**Creative Lab Discovery 16**
Panasonic CD ROM
Sound Blaster 16
15 Titles
Speakers
$239

**Double Speed Package**
2x Speed CD ROM
True 16 bit Sound Card
13 CD Titles
Speakers
$185

**Triple Speed Package**
3x Speed NEC CD ROM
Sound Blaster 16 SCSI
13 CD Titles
40 Watt Hi-Fi Speakers
$365

**Quad Speed Package**
4x Speed CD ROM
Sound Blaster 16
13 CD Titles
40 Watt Stereo Speakers
$295

## NETWORK SPECIALIST!

Novell Certified NetWare Engineer

FREE CONSULTING!!

**Network Cards**

| | |
|---|---|
| Ethernet 16 Bit Card | $24 |
| 10 Base T 16 | $25 |
| Ethernet Combo | $29 |

**Network Software**

| | |
|---|---|
| Netware 3.12 | CALL |
| Netware 4.01 | CALL |
| Windows for Workgroup | CALL |
| Windows NT | CALL |

**OTHER**

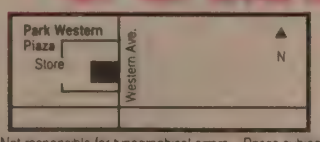
| | |
|---|---|
| 8 Port 10BT Hub | $145 |
| 12 Port 10BT Hub | $299 |

CALL FOR SBT ACCOUNTING PACKAGE

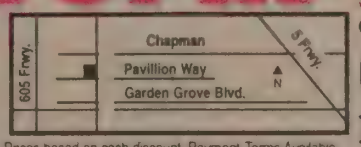
BUY TODAY, DON'T PAY UNTIL TOMORROW! 90 DAYS SAME AS CASH! FINANCING AVAILABLE!

# COMPUTOPIA

901 N. Western Ave.
Suite 2
Los Angeles, CA 90029
**(213) 467-4646**
**Fax (213) 467-4600**




Business Hours:
Mon.-Fri.
9:30 am-6:30 pm
Sat.
10 am - 6 pm




12093 S. Brookhurst St.
Suite D
Garden Grove, CA 92640
**(714) 530-2200**
**Fax (714) 530-5500**

Not responsible for typographical errors Prices subject to change without notice Prices based on cash discount Payment Terms Available

# In Memory Of Kathleen Creighton

In January I went on a much-anticipated vacation on Kauai, having announced to staff and writers my full intention of becoming a tropical vegetable for the duration.

Sneaking onto The WELL one fine morning via the PowerBook on the kitchen table, I was immediately accosted by Kathleen.

"WHY ARE YOU ONLINE?" she demanded. "GO SWIM! GO LIE ON THE BEACH! GET A LIFE!"

As it turned out, this was essentially our last conversation.

• • • • •

Kathleen died unexpectedly on February 4 at her home in Forestville, leaving an enormous void in the online community whose very existence she was fond of denying. Most of us found out by logging onto The WELL and finding a memorial topic in progress, with people from all over cyberspace expressing shock and paying tribute to a woman they'd never met who had profoundly affected their lives.

"Kathleen didn't warm to everyone," said Monsignor Burns at her funeral mass, "just those with *standards*." Long before she became *casey@well.sf.ca.us*, Kathleen was a force to be reckoned with. Smart, strong-willed, and opinionated, she called 'em as she saw 'em without regard to whom she might alienate in the process. At the same time, she was a fount of information and a rock of support to hundreds of people on the many boards, systems, and newsgroups she frequented.

It was only natural that she should write our Bay Area BBS column, and she did it admirably, highlighting the good and ridiculing the bad (and taking great delight in telling me "I told you so!" when one of her dire prognostications about some ill-behaved system would come to pass). When it came time to start the Online Services column that began last month, I never seriously considered giving the job to anyone else.

In fact, our last cover story was essentially her doing—I'd sent her off to email Tim Oren about the GIF brouhaha in the sure knowledge that she'd do a fine job, and a few days later she mailed me back, "Hey, Tim says he'll be in town for RSA and let's do interview..."

Sooner or later we'll have to find new people to take over her columns, but it's not going to be the same.

Some folks on The WELL are working on a Web page for Kathleen, which will include the columns she did for us, as well as other work, including an article she did some years back for *Whole Earth Review* containing practical advice on finding rental housing when you're a pet owner. When it's up, we'll be sure to inform our readers of the URL.

It won't be the same as logging on every morning to see what Casey's got to say for herself today, but it will be good.

*—ME*

Our regular Contributors page will return next month.

## Kathleen's Dog Needs Home

Left behind by Kathleen's passing is her constant and well-loved companion Annie (aka C & L's Kali Annie O'Reilly), a six-year-old Akita.

Annie is big, strong, smart, and affectionate. She is presently being cared for by friends of Kathleen's and is well and content. However, an ideal situation for her would be as an only pet of an Akita-savvy person who could spend lots of time with her; a large fenced yard is also highly desirable. A Bay Area location that would allow us humans in her extended family to visit would be a major plus.

If you'd be interested in adopting Annie, please contact Linda Wroth of Akita Rescue at (510)233-2135, or send her email at *lwroth@netcom.com* .

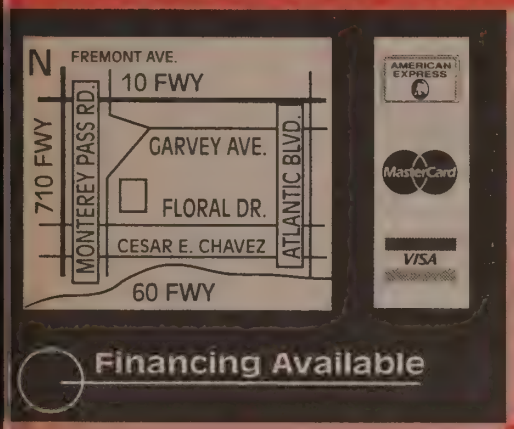
OPEN 7 DAYS

# Computer Pacer

1460 Monterey Pass Rd. #B, Monterey Park, CA 91754

**MON — FRI 9am-6pm • SAT 10am-3pm • SUN 1pm-5pm**

PHONE: (213) 262-1087 FAX: (213) 264-1481




Financing Available

Have you looked at your local Yellow Pages recently? It's not as thick as it was 3 years ago. The recession had a lot to do with it but businesses fail in good times and bad. Why? There are many reasons:

- Not enough money to survive during the bad times.
- Offering products and services that haven't kept up with technology or demand.
- Selling products that are of inferior quality.

You may not have heard of Computer Pacer USA, but it's been in business for over 8 years — almost half the life of the personal computer industry.

Service and reliability are the keys to customer satisfaction. We're here to answer your questions. When you want new products or services, we make sure the products are dependable and powerful. We guarantee good service and deliver a product with a good value. We don't charge too much.

Computer Pacer's specialty is computers that meet the customer's needs — a first time buyer or a corporation.

Over the years the company has grown but the tradition of service and quality continues. Computer Pacer customers count on it. You can too!

**We Accept**
**Government Purchase Orders**
**30 Days — 45 Days**

- **Free 3 Button Serial Mouse**
- **Free CD w/System Purchase**

## WHO'S WHO REGISTRY 1994-1995

**Thank You For Choosing Us:**

City of Monterey Park
County of Los Angeles
DWP • Honeywell
NBC • U.S.C.

**CUSTOM CONFIGURATIONS AVAILABLE**

## PERIPHERALS

### FAX/MODEMS

- 2400 Internal Modem w/phone cable and software...$39
- 9600 Fax/2400 Int. Modem w/phone cable and Superfax Software for Windows.....$45
- 14,400 Int. Fax Modem .32, .42 w/phone cable and Winfax Lite.....$62
- Voice Activated Fax Modem 14,400/14,400.....$89

### ADD ON CARDS

- 32 Bit VL Bus IDE I/O Enhanced.....$29
- ATI PCI 64 Bit 16.7 Million Color Super VGA Graphic Card w/One Meg.....$149
- 32 Bit VL Bus Graphic Card Expandable to 2MB.....$79

### HAND SCANNER FOR WINDOWS

Windows-based Photo Deluxe Image processing software converts black & white images into 256 greyscale images; includes GO-OCR software, features side-mounted buttons and rear wheels for easy scanning.....$119

### NETWORKS

Novell Netware.....CALL
Ethernet Network Card 16 Bit.....$49

### ACCESSORIES

Power Center Surge Protector.....$28

### KEYBOARDS

101 Enhanced Keyboard w/Dust Cover.....$28
Keytronic 101 Enhanced Keyboard.....$38

### POWER SUPPLIES/UPS

200 Watt UL.....$38
230 Watt.....$38

### CASES

Vertical Case w/P/S.....$47
Desktop Case w/P/S.....$69
Deluxe Vertical w/250 P/S.....$79
Heat Sink Fan.....$9

### MONITORS

Shamrock 14" SVGA .39 NI.....$198
Shamrock 14" SVGA .28 NI.....$239
Shamrock 15" SVGA .28 NI.....$329
KFC 15" SVGA .28 NI.....$309
Orchestra 17" SVGA .31 NI.....$479
Shamrock 17" SVGA .28 NI.....$579

## 486SLC-33

**Pacer Office**

- 486 SLC 33MHz Motherboard
- 2MB RAM, Exp. to 32MB
- Upgradable to 66
- Intel Overdrive Ready
- 8 Expansion Slots
- Math Coprocessor Built-in
- TEAC 1.44 High Density 3-1/2" Floppy
- 270 Meg Hard Disk Drive
- 32 bit VESA Local Bus Dual Hard/Floppy Controller
- 2 Serial, Parallel, Game
- Vertical or Desktop Case
- 230 Watt Power Supply
- Hi Color Super VGA Graphic Card 1024 x 768
- 14" Super Hi-Res VGA Color Monitor Tilt Swivel 1024 x 768 .39 dp
- Space Saver 101 Enhanced Keyboard
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Cables and Manuals

**ONLY $799 Complete**

## 486DX2-66

**Pacer Graphic Innovation**

Special

- 80486 DX2 66 VL Bus w/256k Cache
- 4MB RAM, Exp. to 128MB
- Intel 486DX2-66 CPU
- Heat Sink
- Intel Overdrive Socket Ready
- Intel Verified
- TEAC 1.44 High Density 3 1/2" Floppy
- 428 Meg IDE Hard Disk Drive
- 32 Bit VL Bus Dual/Hard Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 230 Watt Power Supply
- 32 Bit VL Bus 16.7 M Color Super Graphics Accelerator w/1 Meg exp. to 2 Meg on board
- 15" Energy-Saving Non-Interlace Super VGA Color Monitor w/Tilt and Swivel 1024x768 .28 dp
- Space Saver 101 Enhanced Keyboard
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Cables and Manuals

**ONLY $1,168 Complete**

## Pacer

**Pentium 75**

- Intel Pentium™ 75MHz CPU
- Cooling Fan
- 75/90MHz Motherboard w/256K Cache
- Expandable to 192 Meg
- 4MB RAM
- Teac 1.44 High Density 3-1/2" Floppy
- 535 Meg Hard Disk Drive
- PCI Hard Drive Controller
- High Speed UARRT 16550 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 250 Watt Power Supply
- ATI Mach 64 Graphic Accelerator Card w/1 Meg Video RAM
- 15" Energy Saving Non Interlaced Super VGA Color Monitor w/ Tilt and Swivel 1280 x 1024 .28 dp
- Space Saver 101 Enhanced Keyboard
- Microsoft Serial Compatible 3 Button Serial Mouse
- Mouse Pad

**ONLY Complete $1,769**

## PCI/ISA DX2-66

**Super Pacer**

- PCI IDE Hard Drive Controller
- PCI/ISA w/256K Cache
- Intel 486DX2-66 CPU-w/Heat Sink
- 8MB RAM Exp. 112MB
- Intel Verified
- TEAC 1.44 High Density 3 1/2" Floppy
- 540 Meg Hard Disk Drive
- PCI Dual Hard/Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 250 Watt Power Supply
- PCI 64 Bit Super Graphic Accelerator w/1 Meg 16.7 Million Colors Expandable to 2 Meg
- 15" Energy Saving Super VGA Color Monitor w/Tilt and Swivel 1280x1024 .28 dp
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Space Saver 101 Enhanced Keyboard
- Cables & Manuals

**ONLY $1,398 Complete**

## Pentium™

**PCI 4X CD Multimedia**

BEST BUY

14 CD Titles

- PCI IDE Hard Drive Controller
- Intel Pentium 60MHz CPU
- Cooling Fan
- 8 Expansion Slots
- 256K Cache, Exp to 512K Cache
- 8MB RAM, Exp. to 112MB
- TEAC 1.44 High Density 3 1/2" Floppy
- 535 Meg Hard Disk Drive
- PCI Dual Hard/Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 250 Watt Power Supply
- Super Graphics Accelerator Card w/2 Meg 16.7 Million Colors
- Quad Speed CD ROM
- Sound Blaster 16 Bit Stereo Compatible
- Sound Card, Sound Software
- 2 Volume Adjustment Sound Speakers
- 15" Energy Saving Super VGA Color Monitor w/Tilt and Swivel 1280x1024 .28 dp
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Space Saver 101 Enhanced Keyboard
- Cables & Manual

**ONLY $1,999 Complete**

## Multimedia Machine

BEST BUY

- 80486DX2-66 VL Bus w/256K Cache
- 8MB RAM, Exp. to 128MB
- Intel 486DX2-66 CPU w/Heat Sink
- Intel Overdrive Ready
- Intel Verified
- TEAC 1.44 High Density 3-1/2" Floppy
- Volume/Balance Control
- 72 Watts Amplifier, 20 per Channel
- Built-in Speakers Chassis w/Power Supply
- 540 Meg IDE Hard Disk Drive
- 32 Bit VLB Dual H/F Controller
- 32 Bit VLB Super Graphics Accelerator w/One Meg
- Double Speed CD ROM w/250ms Access time
- Kodak CD Compatible
- SoundBlaster 16 Bit Stereo Compatible Sound Card
- Sound Software
- 14" Energy Saving Super VGA Color Monitor w/Tilt and Swivel 1024 x 768 .28 dp
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Space Saver 101 Enhanced Keyboard
- 14,400/14,400 Int. Fax Modem w/phone cable and Winfax software for Windows

**ONLY $1,498 Complete**

## 1995 SPECIALS

### Multimedia Bundle

**2X Double Speed (300K) Valuable Kit** — $228
- Sony 33A CD ROM Compatible (250ms)
- True 16-Bit Stereo Sound Card
- Pre Amplified Stereo Speakers
- 12 CD Titles (Encyclopedia, Animals, etc.)

**2X Sound Blaster Multi CD 16** — $248
- Panasonic 563 2X CD ROM (250ms)
- Sound Blaster 16-Bit Stereo Sound Card
- Pre Amplified Stereo Speakers & Microphone

**4X Teac Quad Speed (195ms/600K)** — $348
- Sound Blaster 16 Bit MCD Stereo Sound Card
- Pre Amplified Speakers
- 14 CD Titles (Compton's Interactive Encyclopedia '95)

**4X Toshiba SCSI (155ms/600K)** — $448
- Sound Blaster 16 Bit SCSI Stereo Sound Card
- Pre Amplified Stereo Speakers
- 14 CD Titles (Compton's Interactive Encyclopedia '95)

### Multimedia Special

Sony Double Speed CD ROM 250ms, External Sound Speakers, Sound Blaster 16 Bit, Stereo Compatible Sound Card Sound Software — $198

### Deluxe CD Titles:

| | | |
|---|---|---|
| -Encyclopedia | -Might & Magic | -US Atlas |
| -RoboCop 3D | -D/Generation | -Chessmaster 3100 |
| -Ocean F-29 | -Contraption Zack | -World Atlas |
| -Pushover | -Chessmaster 2100 | -Mavis Beacon Teaches Typing |
| -Epic | -Life & Death II | |

$39

### 17" Super VGA Color Monitor w/Tilt and Swivel

only $479

- TERMS C.O.D., Cash & Company POs on approval
- Prices do not include shipping
- Prices subject to change without notice
- Listed names of products are registered trademarks of their respective companies
- Pacer USA is a trademark of Power Tech Harrington
- One Year Warranty Parts & Labor
- Advertised prices reflect a cash discount

## Pentium™ Power Pacer Barracuda

- Pentium™ Intel™ 90MHz CPU w/Cooling Fan
- 90MHz PCI/ISA Motherboard w/256K Cache
- 8 Expansion Slots
- 4 PCI, 4 ISA Slots
- 8MB RAM, Exp to 128MB
- 256K Cache, Exp to 512K Cache
- TEAC 1.44 3-1/2" High Density Floppy Drive
- 540 Meg Hard Disk Drive
- PCI 64 Bit Dual Hard and Floppy Controller
- PCI IDE Hard Drive Controller
- UARRT 16550 2 Serial Parallel Game
- New Generation Deluxe Vertical Case or Desktop Case
- 250 Watt Power Supply
- ATI PCI Mach 64 Bit Super Graphic Accelerator Card w/1 Meg 16.7 M Colors
- 17" Non-interlaced Energy Saving Super VGA Color Monitor
- 101 Enhanced Keyboard w/Dust Cover
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Cables and Manuals

**ONLY $2,299 Complete**

BY PAUL HOFFMAN

# Industry Insight

## Intel/AMD Truce; Internet Security Flap

## AMD And Intel Settle All Outstanding Lawsuits

**The long-**standing legal battle between Advanced Micro Devices and Intel is over, for now. Early last month, the two companies agreed to drop all lawsuits that they had filed against each other and start with a clean slate. Companies that buy chips from AMD can now breathe easier, knowing that their supply won't be cut off by a court.

For users, this means that 386 and 486 computers will drop in price and increase in availability as AMD spends more of its time on manufacturing and less on defending itself. It's also good news for users of Intel systems because AMD countered most of Intel's lawsuits with its own. Basically, the top management for both companies lost tens of thousands of hours dealing with lawyers instead of moving their companies forward.

Many things led to the settlement, including a string of legal defeats for Intel, culminating with a stinging loss from the California Supreme Court over Intel's contesting an arbitration ruling. That ruling gave AMD the right to make the 386 under its original contract with Intel. That case was based on Intel and AMD agreeing to let a mutually chosen arbitrator decide an early dispute, and Intel then rejecting the arbitrator's decision. Intel had also lost cases where it tried to prevent other companies from making 386 and 486 clones by backing out of previous agreements with its chip-manufacturing partners.

Most analysts feel that the settlement will help AMD much more than it will help Intel, but that might be simply because Intel is so much larger than AMD that no settlement could have had a strong positive effect on Intel's bottom line. The financial portion of the settlement has AMD paying Intel $58 million for improper use of Intel's ICE (in-circuit emulator) code in AMD's recent 486 chips and Intel paying AMD the $18 million that the arbitrator assigned years ago.

The net loss of $40 million to AMD may seem large, but settling the suit could save AMD that much in just one year's worth of lawyers' fees. Giving AMD a clear, royalty-free license to make and sell CPUs (as long as they don't use Intel's ICE code) lets many computer manufacturers feel better about ordering from AMD, which will probably boost sales significantly. Given that Intel has all but abandoned the 486 market to AMD and Cyrix, and that AMD is expected to release its Pentium-class processor this year, the settlement leaves AMD in a great position with its primary customers.

The settlement also states that neither company will sue the other for actions that took place before January 6 of this year. That means that neither side can pull a new patent out of its hat and sue the other company for possibly infringing on the patent before the settlement. Of course, what happens after January 6 is fertile ground for the now-idle lawyers for both companies.

Intel protects its CPUs with many patents, some of which it licenses to competitors in the CPU market. It is widely expected that Intel will try to stop AMD, Cyrix, and others from making Pentium-class processors if those processors contain methods for which Intel has new patents. However, companies like AMD have not been idle on the patent front, and have been getting their own patents, the rights to which they hope to trade with Intel in case of future lawsuits. Intel's lawyers are probably already studying AMD's K5 processor and Cyrix's M1 processor with an eye to keeping themselves employed in the future.

Compared to Intel's humiliating PR debacle with the Pentium bug over the last few months, the legal settlement was probably only a small defeat. Intel is budgeting half a billion dollars to cover the replacement costs for the flawed Pentiums, but it might have lost an equal amount in good will and positive product recognition due to its initial mishandling of user complaints. Put next to

*continued on page 20*

**To spoil the not-so-exciting ending: the Internet is no less safe now than it was a few months ago.**

1GB HARD DRIVE $445

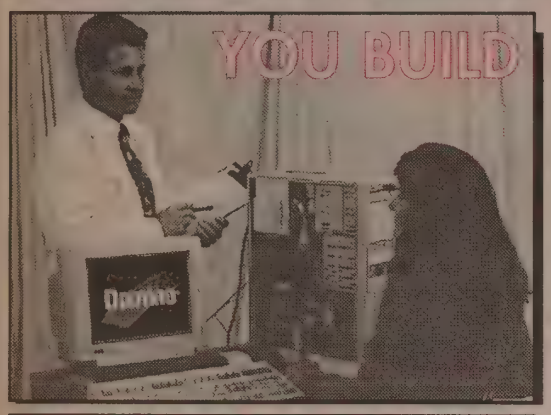
# Domino COMPUTER

AMD 486/DX2/80 V-L Bus Zif SOCKET w/CPU $299

## BUILD YOUR OWN COMPUTER - WITH OUR TRAINED TECHNICIANS

**17" SVGA NI MONITOR**
Digital Control, Flat Screen, On-Screen program $579
(while supplies last)

## OR DOMINO WILL CUSTOM BUILD YOUR COMPUTER FOR YOU

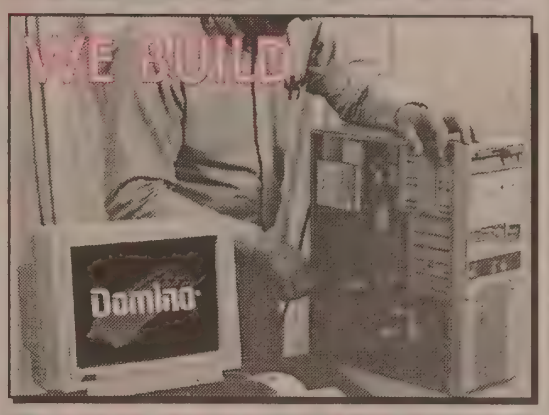



### INTEL 486/DX2/66 MultiMedia System

- 4 MB RAM
- 1.44 MB F.D.
- 420 MB H.D.
- 1 MB SVGA Card
- 14" SVGA NI Monitor
- Mini Tower
- 101 Enh. Keyboard
- 25, 1P, 1G, Ports
- Serial Mouse & Pad
- 2x CD-ROM
- Sound Blaster 16 Compatible
- 6 CD Titles
- Stereo Speakers

$1239

Add $15 For 486/DX2/80 Option
Add $25 For 420MB Hard Drive Option




### MULTIMEDIA 2X BUNDLES

- 2X CD-ROM
- Sound Blaster 16 Compatible
- CD Titles
- Stereo Speakers

$239

### MULTIMEDIA 4X BUNDLES

- 4X CD-ROM
- Sound Blaster 16 Compatible
- CD Titles
- Stereo Speakers

$349

## SPECIALS

### PENTIUM 90

- PENTIUM 90 MHZ CPU
- PENTIUM PCI MOTHERBOARD
- 256K CACHE
- 8MB 72 PIN RAM
- 540MB HARD DRIVE
- 1.44MB FLOPPY DRIVE
- PCI IDE
- PCI WINDOWS ACCELERATOR W/1MB
- 101 ENHANCED KEYBOARD
- 2 SERIAL, 1 PARALLEL, & 1 GAME PORT
- SERIAL MOUSE
- COMPACT MID-TOWER CASE

$1779

* Monitor Not Included

### 486/SLC/33 COMPLETE SYSTEM

- 2 MB RAM
- 240 MB Hard Drive
- IDE
- 2 SERIAL, 1 PARALLEL, & 1 GAME PORT
- 1.44MB Floppy Drive
- SVGA Card
- SVGA Monitor
- 101 ENHANCED KEYBOARD
- Mouse/Pad
- Mini Tower

$669

Add $25 for 420MB Hard Drive Option

### PARTS/SPECIALS/MOTHERBOARDS

- 486 VESA Local Bus 30/72 Pin Zif socket Motherboard . . . . . $109
- VESA Local Bus SVGA Card, with 1 MB . . . . . $69
- 420MB Hard Drive. . . . . $199
- 540MB Hard Drive. . . . . $239
- High Speed I/O Card w/16550 UART. . $39
- 250 Tape Back-up Drive . . . . . $159
- 1 GB IDE Hard Drive . . . . . $445
- 14.4/14.4 Voice Fax Modem with phone answering system . . . . . $89
- Network Card NE2000 Compatible Combo . . . . . $39
- AMD 486/DX2/80 V-L Bus Zif Socket w/CPU . . . . . $299
- Pentium PCI/66/90 Motherboard . . $CALL!

### CORPORATE CUSTOMERS:

On-Site Maintenance Contracts
Call for a FREE On-Site Evaluation
(also On-Site Upgrades & Repairs)

**We Specialize in NOVELL and UNIX Networks**

NOVELL Authorized
Call for Free Consultation
Certified Novell Engineer on Staff

## DOMINO is SPECIAL!

Most LAN system integrators don't know PC hardware, & most PC resellers don't know LANs. DOMINO does it ALL!
As a NOVELL GOLD RESELLER, we are in a position to provide COMPLETE SOLUTIONS and TOTAL SUPPORT.

- For details contact your nearest DOMINO CENTER .
- **For High level LAN & WAN Enterprise Solutions call Edward Wang, Enterprise CNE @ (818) 340-7490.**

### SOUTHERN CALIFORNIA DOMINO BUSINESS CENTERS:

**TORRANCE**
2535 237th St., Suite102
310/325-9701
Open Sunday by Appt.

**CANOGA PARK**
22330 Sherman Way, Suite C7
818/340-7490

**IRVINE**
17145 Von Karman Ave.
Suite 106
714/252-8494

**YORBA LINDA**
3920 Prospect Ave., Suite F
714/579-0808
Open Sunday by Appt.

**CLAREMONT**
975 W. Foothill Blvd.
909/482-4600
Open Sunday by Appt.

Novell Certified NetWare Engineer | Novell Enterprise CNE | Novell Gold Authorized Reseller | Novell Authorized Value Added Master

Leasing Program Available for PC & Network Systems over $2000

We are not responsible for typographical errors. Prices subject to change without notice.

Domino COMPUTER
Your Neighborhood Workshop Service and Upgrade Center

# UNITEK™

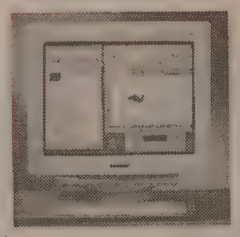
90 DAY FREE FINANCING

**W. LOS ANGELES**
12024 Wilshire Blvd.
West Los Angeles, CA 90025
**310 . 820 . 2400**
Fax . 310 . 826 . 1455

**ENCINO**
16027 Ventura Blvd.
Encino, CA 91436
**818 . 907 . 7878**
Fax . 818 . 907 . 7799

SONY
Authorized Dealer

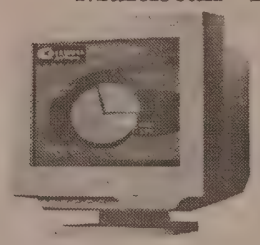
## New — Sony CPD-1425



- **Mac Compatible**
- 14" Super FinePitch™ Trinitron Tube
- .25mm Aperture Grille pitch
- Maximum resolutions:
  PC: 1024 x 768 at 60Hz
  MAC: 830 x 624 at 75Hz
- Energy Star Compliant
- 3 Year Parts and Labor Warranty, 2 years on CRT

**$319**

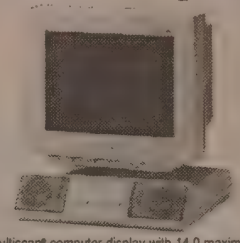
## Multiscan® 15sf



- **Mac Compatible**
- 15" Digital Multiscan® computer display with 14.0 maximum diagonal viewable area
- Trinitron® technology delivers bright images and vibrant colors
- .25mm Aperture Grille pitch
- EPA Energy Star and MPR II compliant
- Supports PC and Macintosh resolutions from VGA to 1280 x 1024 at 60Hz
- New design features simple control buttons and minimizes footprint
- Includes color temperature control
  #SON-15SF

**$419**

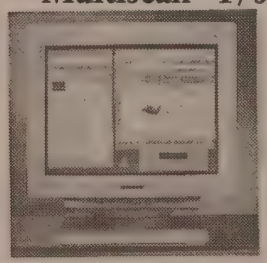
## CPD-15sf w/speakers



- 15" Digital Multiscan® computer display with 14.0 maximum diagonal viewable area
- Trinitron® technology delivers bright images and vibrant colors
- .25mm Aperture Grille pitch
- EPA Energy Star and MPR II compliant
- Supports PC and Macintosh resolutions from VGA to 1280 x 1024 at 60Hz
- New design features simple control buttons and minimizes footprint
- Includes color temperature control
- INCLUDES SONY CSS-B100
  Computer Speaker System
  Space-saving ergonomical design
  Fits under computer monitor

**$509**

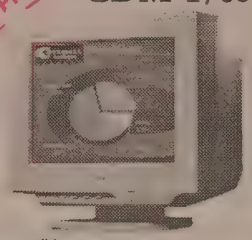
## Multiscan® 17sf



- **Mac Compatible**
- 17" Digital Multiscan® computer display with 14.0 maximum diagonal viewable area
- Trinitron® technology delivers bright images and vibrant colors
- .25mm Aperture Grille pitch
- EPA Energy Star and MPR II compliant
- Supports PC and Macintosh resolutions from VGA to 1280 x 1024 at 60Hz
- New design features simple control buttons and minimizes footprint
- Includes color temperature control
  #SON-17SF

**$849**

## New Lower Prices — GDM-17se



- **Mac Compatible**
- 17" Super Fine Pitch™ Multiscan® Trinitron® color graphic display
- Unique ASIC design automatically adjusts image geometry parameters across a continuous range of scan frequencies
- Energy Star and VESA-DPMS compliant
- .25mm Aperture Grille pitch
- Maximum resolution of 1280 x 1024 at 77Hz refresh
- Horizontal scan range of 31.5 to 82KHz
- Easy-to-use digital control of screen images
- Includes color temperature control for publishing, photography, imaging, and design applications
- Swedish MPR II compliant

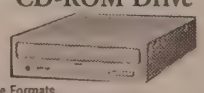
**$969**

## GDM 20se

- **Mac Compatible**
- 20" Super Fine Pitch™ Multiscan® Trinitron® color graphics display monitor
- .30mm Aperture Grille pitch
- Maximum resolution of 1600 x 1200 at 80Hz refresh (non-interlaced)
- Variable scan frequency of 28 to 85KHz
- Overscanning for crisp edge-to-edge images
- Energy Star Compliance Ecologic
- Includes color temperature control for publishing, photo and design applications
- Full compliance with Swedish MPR II standards for VLF/ELF magnetic and electrical emissions

**$1839**

## Internal Double-Speed CD-ROM Drive

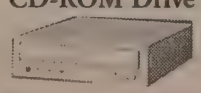


- Compatible Formats
  -MPCII -Multisession Photo CD -CD-ROM MODE 1 and 2 Discs-CD Digital Audio
- Interface
  -Sony SLCD AT-type Bus
- Average Access Time
  -320ms typical (double)
  -400ms typical (single)

w/o Interface Kit **$139**

**CDU-33A01**

## Internal SCSI CD-ROM Drive

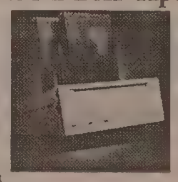


- Compatible Formats
  -MPC II
  -Single and Multisession Photo CD
  -CD-ROM XA
  -CD Bridge
  -CD-ROM Mode 1 and 2 discs
- -CD-Digital Audio
- Interface
  -SCSI-2 bus
- Average Access Time
  -Single speed: 350ms
  -Double speed: 250ms
  -2 4 xspeed 220ms

**$179**

**CDU-55S01**

## 3.5" DDS-2 DAT Tape Drive

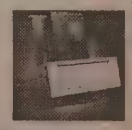


- Cap: 4GB
- Interface: SCSI-2
- Access time: 35 seconds maximum

**Int: $849 Ext: $979**

**SDT-5200/M**

## 3.5" DDS-2 DAT Tape Drive

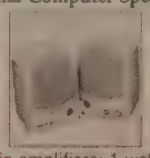


- Cap: 4GB w/o data compression
  8GB w/data compression
- Interface. SCSI-2
- Access time: 35 seconds maximum
- Sustained transfer rate 366-732 KB/sec

**Int: $919 Ext: $1039**

**SDT-5000/M**

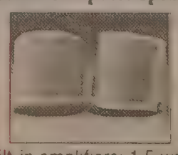
## SRS-PC20
**Personal Computer Speakers**



- Built-in amplifiers: 1 watt per channel (2W)
- Speaker controls: Master volume, Bass boost

**$33.99**

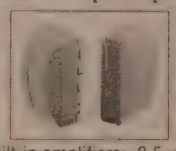
## SRS-PC30
**Personal Computer Speakers**



- Built-in amplifiers: 1.5 watts per channel (3W)
- Speaker Controls: Master volume, Bass boost

**$62.99**

## SRS-PC50
**Personal Computer Speakers**



- Built-in amplifiers: 2.5 watts per channel (5W)
- Speaker Controls: Master volume, Bass boost

**$89.99**

## SRS-58PC
**Active Stereo Speaker System**

- Built-in amplifiers: 3 watts per channel (6W)
- Speaker controls:
  Independent volume for optimum stereo balance.
  Independent Dynamic Equalizer System

**$84.99**

## SRS-88PC
**Active Stereo Speaker System**

- Built-in amplifiers: 10 watts per channel (20W)
- Speaker controls:
  Independent volume for optimum stereo balance
  Independent Dynamic Equalizer System

**$129.99**

## SRS-D2KPC
**3-Piece Personal Computer Speakers**

- 3-piece design: two full-range, bass reflex speakers, one bass reflex subwoofer
- Speaker controls:
  Independent volume for optimum stereo balance.
  Independent Dynamic Equalizer System

**$139.99**

Sony, Trinitron, Multiscan, and Super Fine Pitch are trademarks of Sony

# UNITEK™

90 DAY FREE FINANCING

**The Most Complete Apple® Stores!**

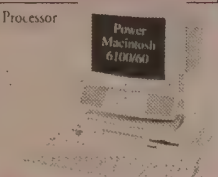
**W. LOS ANGELES**
12024 Wilshire Blvd.
West Los Angeles, CA 90025
**310.820.2400**
Fax. 310. 826. 1455

**ENCINO**
16027 Ventura Blvd.
Encino, CA 91436
**818.907.7878**
Fax. 818. 907. 7799

Authorized Reseller
Authorized Service Provider

## NEW Apple® Power Macintosh™ 6100/66

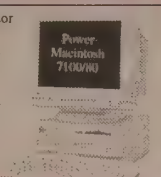
- 66MHz Power PC 601 Processor
- 256K Cache
- 1MB VRam
- Built-in Ethernet
- 16-Bit Stereo Sound Input & Output
- Monitor & Keyboard not included



8/350
**$1699** FREE CLARIS WORKS 3.0 A $189 VALUE!

## NEW Apple® Power Macintosh™ 7100/80

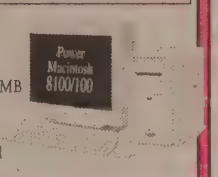
- 80MHz Power PC 601 Processor
- 256K Cache
- 1MB VRam
- Nine built-in ports
- Expandable to 136MB
- Built-in Ethernet
- Supports All Apple Displays
- KB Monitor not included



8/700/CD
**$3049** FREE UNITEK EXTENDED KEYBOARD A $149 VALUE!

## NEW Apple® Power Macintosh™ 8100/100

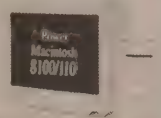
- 100MHz Power PC 601 Processor
- 256K Cache
- 2MB VRam
- Memory Expandable to 264MB
- 256K level-2 cache
- Three NuBus slots
- Ethernet (AAUI)
- Monitor & KB not included



8/700
**$3399** FREE UNITEK EXTENDED KEYBOARD A $149 VALUE!

## Apple® Power Macintosh™ 8100/110

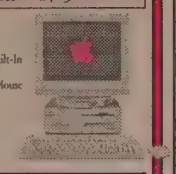
- 110MHz Power PC 601
- 2MB VRAM
- 256K Level 2 Cache
- Memory expand to 264 MB
- System 7.5



16/2GB/CD
**$5879**

## Apple® Macintosh® Performa® 475

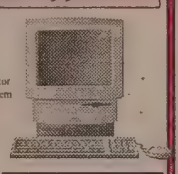
- Complete System
- 68040/25MHz Processor
- 4MB Ram, 160MB HDD
- 12 Software Programs, already Built-In
- 14" RGB Color Monitor
- Fax modem-send fax • KB and Mouse
- Multimedia Ready
- 1 year limited warranty
- 1 year of in-home Service



COMPLETE SYSTEM
**$1099** BEAT/MEET ANY PRICE*

## Apple® Macintosh® Performa® 550

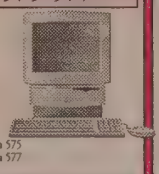
- 5MB Ram, 160MB HDD
- 68030/33MHz Processor
- 4 Interactive CD-ROMs
- 12 Software Programs
- Internal CD-ROM and Music
- Built-in 14" Sony Color Monitor
- Global Village 24/98 Fax/Modem
- Keyboard & Mouse



COMPLETE SYSTEM
**$1299** BEAT/MEET ANY PRICE*

## Apple® Macintosh® Performa® 575/577

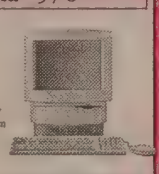
- Complete System
- 68030/33/66MHz Processor
- 250 MB HDD
- 4 Interactive CD-ROMs
- 12 Software Programs
- Internal CD-ROM drive for both CD ROM and Music
- Built-in 14" Sony Color Monitor
- Global Village 24/98 Fax/Modem
- Keyboard & Mouse
- 5MB Ram 250MB HDD/Performa 575
- 5MB Ram 320MB HDD/Performa 577



**$1449/$1549** BEAT/MEET ANY PRICE*

## Apple® Macintosh® Performa® 578

- Complete System
- 68030/33/66MHz Processor
- 8MB Ram, 320 MB HDD
- 4 Interactive CD-ROMs
- 12 Software Programs
- Internal CD-ROM drive for both CD ROM and Music
- Built-in 14" Sony Color Monitor
- Global Village 24/98 Fax/Modem
- Keyboard & Mouse



**$1699** BEAT/MEET ANY PRICE*

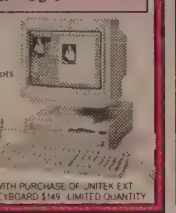
## Apple® Macintosh® Performa® 630/630CD

- Complete System
- Motorola 68030 66 MHz processor/33MHz data bus
- 250MB HDD
- Integrated 14" plus Display
- Apple Design KB
- 12 Software programs
- Internal CD-ROM
- Fax/Modem
- 6 CD Titles
- 1 year of in-home Service
- 630CD: Int CD Drive
- 630CD: 8MB Ram

**$1499/$1899** BEAT/MEET ANY PRICE*

## Apple® Macintosh Quadra® 630

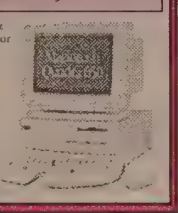
- Motorola 68040 66MHz Processor/33MHz data base
- 8MB RAM
- Power PC upgradable
- Includes Communication slots for Ethernet or Fax/Modem
- Video slot for NTSC, PAL, SECAM video input Card
- Monitor & KB not included



4/250
**$949*** *WITH PURCHASE OF UNITEK EXT KEYBOARD $149 -LIMITED QUANTITY

## Apple® Macintosh Quadra® 650

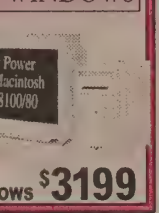
- Motorola 68040 33MHz
- Built-in Math Co-Processor
- 3 NU BUS slots
- KB & Monitor NOT Included



8/230
**$2079**

## Apple® Power Macintosh™ 8100/80 SOFTWINDOWS

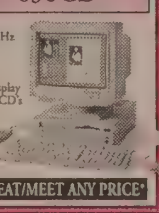
- 80MHz Power PC 601 Processor
- 16MB Memory, 256K Level 1-2 Cache
- 2MB Video VRAM
- Memory Expandable to 264MB
- Insignia™ Softwindows Included
- Monitor & Keyboard Not Included



BEST BUY
16/500/SOFT WINDOWS **$3199**

## Apple® Macintosh® Performa® 638CD

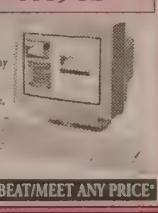
- Complete System
- Motorola 68LC040/66/33MHz processor/33MHz data bus
- 8 MB RAM/350MB HDD
- Apple TV/Video System
- Apple Multiple Scan 15" Display
- Internal CD Drive w/Many CD's
- KB, Modem, Software Incl.



**$2299** BEAT/MEET ANY PRICE*

## Apple® Macintosh® Performa® 6115CD

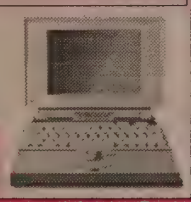
- Complete System
- Power PC 601/60MHz
- 8MB Ram, 350MB HDD
- Apple Multiple Scan 15" Display
- KB, Monitor, Modem
- Global Village Teleport II 14.4
- Apple Design Keyboard, Mouse, Int. CD Drive



**$2399** BEAT/MEET ANY PRICE*

## Apple® Macintosh® PowerBook® 150

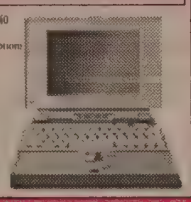
- 68030 Microprocessor
- 33MHz
- 9.5" Backlit, Passive Matrix, Gray-Scale



4/120
**$1349**
FREE COAST CARRYING CASE A $59 VALUE!

## Apple® Macintosh® Duo® 280C

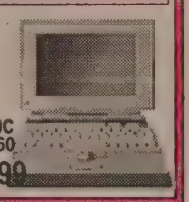
- 68040, 33MHz, 68LC040
- Power PC Upgradable
- Duo Dock & Floppy Option
- Upgradable to 40MB
- Active Matrix Screen



4/240
**$3239**

## Apple® Macintosh® PowerBook® 520/520C

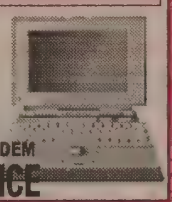
- Motorola 68LC040 50/25MHz
- Upgradable to Power PC Built-In Ethernet



520 4/160 **$1749**
520C 4/160 **$2199**

## Apple® Macintosh® PowerBook® 540C

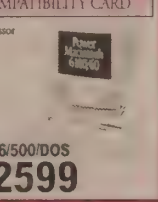
- Motorola 68LC040 66/33 MHz
- Upgradable to PowerPC
- Expandable to 36MB



540C 4/320
540C 12/500/MODEM
**$BEST PRICE**

## NEW Apple® Power Macintosh™ 6100/66 w/DOS COMPATIBILITY CARD

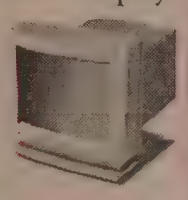
- 66MHz Power PC 601 Processor
- 256K Cache
- 1MB VRAM
- Built-in Ethernet
- 16-bit Stereo Sound Input and Output
- Monitor & keyboard not included



FREE UNITEK EXT. KEYBOARD A $149 VALUE!
16/500/DOS **$2599**

## BARGAIN Apple Macintosh Color Plus 14" Display

- .28 Dot Pitch
- 640 x480 Res.



**$299**

## Apple® Multiple Scan 15" Display

- .28mm Dot Pitch
- 1024x768 Res.
- Headphone/Speakers input & output

**$479**

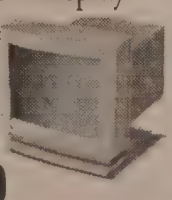
## Apple® Multiple Scan 17" Display

- Trinitron Screen
- Digital Control
- 17" Screen

**$949**

## Apple® Multiple Scan 20" Display

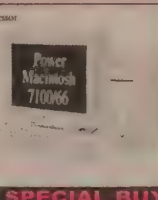
- Trinitron Screen
- Digital Control
- 20" Screen



**$1939**

## Apple® Power Macintosh™ 7100/66

- 66MHz Power/PC 601 Processor
- 1MB of VRAM
- Nine Built-in Ports
- Expandable to 136MB
- Built-in Ethernet
- Supports All Apple Displays
- KB Monitor not included
- System 7.5



8/500
**$2169** SPECIAL BUY

## Apple® Color Stylewriter® 2400

- 360 DPS Resolution
- 3 pages Per Minute
- Two Separate Ink Cartridges

**$447**

## Apple® Color Stylewriter® Pro

- 360DPI Resolution
- 64 Scalable Truetype Fonts
- Color Sync color Matching Tech

**$579**

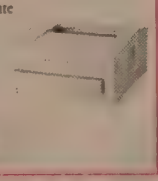
## NEW Apple® Personal Laserwriter® 300

- 300DPI
- 4 pages per minute
- 1MB of RAM
- w/Toner

**$609**

## Apple® Personal Laserwriter® 320

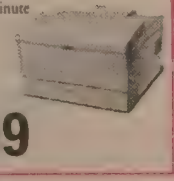
- 300DPI
- 4 Pages Per minute
- 2MB of Ram
- w/Toner



**$859**

## Apple® LaserWriter Select® 360

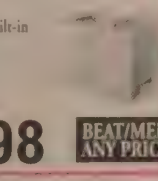
- 600 Dot per inch
- 10 Pages Per minute
- 7MB Ram
- Adobe Postscript 2
- w/Toner



**$1399**

## Apple® LaserWriter™ 16/600PS

- 16 Pages Per minute
- 600 DPI
- Ethernet Built-in
- w/Toner



**$2298** BEAT/MEET ANY PRICE*

Apple, the Apple logo, LaserWriter, StyleWriter, Mac, and Macintosh are registered trademarks of Apple Computer Inc. PostScript is a trademark of Adobe Systems Inc. Classic is a registered trademark, licensed to Apple Computer Inc., PowerBook Duo, Macintosh, System 7, Macintosh Quadra & Power Macintosh are trademarks of Apple Computer Inc. All prices reflect a cash discount.

Prices subject to change w/o notice. Limited to stk. on hand. Unitek is not responsible for typographical errors! ABSOLUTELY NO DEALERS! • *If you see a lower legitimate advertised price that can be verified from a local Authorized Apple Dealer on the exact same In Stock item, Unitek will be happy to MEET/BEAT the competition's price

# UNITEK™ computer stores

# LOWEST PRICES HIGHEST QUALITY

## PENTIUM 90

### Pentium 90MHz CPU

- 8MB Ram, 256K Cache
- 850MB IDE HDD
- 14" SVGA Non-Interlaced Monitor
- Diamond Speedstar PCI SVGA 1MB
- PCI Integrated IDE & I/O
- TEAC 3.5" 1.44 Floppy Drive
- UNITEK Enhanced 101 Keyboard
- Microsoft Compatible Mouse, Mouse Pad
- Mid Tower Case w/CPU Fan

**$1849** intel inside

## PENTIUM 90 MULTIMEDIA

### Pentium 90MHz CPU

- 8MB Ram, 256K Cache
- 540MB IDE HDD
- Samsung 15" SVGA Monitor NI
- Diamond Speedstar PCI SVGA 1MB
- PCI Integrated IDE & I/O
- Teac 3.5" 1.44 Floppy Drive
- UNITEK Enhanced 101 Keyboard
- Microsoft Compatible Mouse, Mouse Pad
- Mid Tower Case w/CPU Fan
- Creative Lab Discovery 16
- Double speed CD
- Sound Blaster 16
- Speakers
- 16 Titles

**$2095** intel inside

## 486DXII-66 MULTIMEDIA

### INTEL 486DXII-66 CPU

- 8MB Ram, 256K Cache
- 540MB Hard Disk
- Samsung 14" SVGA Monitor
- Local Bus 32 Bit SVGA Card 1MB
- IDE/I/O
- 3.5" 1.44 Floppy Drive
- Sound Blaster™ 16 Bit Sound Card
- Double Speed Multisession CD-Rom Drive
- 15 Top Quality CD Titles
- Stereo Amplified Speakers
- Unitek Enhanced 101 Keyboard
- MS Compatible Mouse, Mouse Pad
- Mini Tower Case

**$1399**

## 486DXII-66

### 486DXII-66 CPU

- 4MB Ram, 256K Cache
- 420MB Hard Disk
- 14" SVGA Monitor Local Bus 32 Bit
- SVGA Card 1MB
- IDE & I/O Card
- Teac 3.5" 1.44 Floppy Drive
- UNITEK Enhanced 101 Keyboard
- Microsoft Compatible Mouse, Mouse Pad
- Mini Tower Case

**$989**

## 486DX-33

### 486DX-33 CPU

- 4MB Ram, 256K Cache
- 420MB Hard Disk
- Samsung 14" SVGA Monitor Local Bus 32 Bit
- SVGA Card 1MB
- IDE & I/O Card
- Teac 3.5" 1.44 Floppy Drive
- UNITEK Enhanced 101 Keyboard
- Microsoft Compatible Mouse, Mouse Pad
- Mid Tower Case w/CPU Fan

intel inside **$925**

## 486SX-33

### 486SX-33

- 4MB, 256K Cache
- 420MB Hard Disk
- Samsung 14" SVGA Monitor Local Bus 32Bit
- SVGA Card 1MB
- IDE & I/O Card
- Teac 3.5" 1.44 Floppy Drive
- UNITEK Enhanced 101 Keyboard
- Microsoft Compatible Mouse, Mouse Pad
- Mid Tower Case w/CPU Fan

intel inside **$889**

Authorized Sales & Service

## OKIDATA

Available On Site Service

### OL400E

- 4PPM
- 300DPI
- 512K RAM
- 100 Sheet Tray

After Mfg. Rebate **$349***

### OL410E

- 4PPm
- 600DPI
- 2MB Ram
- 100Sheet Tray

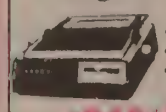
**$645**

### OL410/PS

- 4PPM
- 600DPI
- 2MB Ram
- Postscript Scalable Fonts
- Mac Compt.
- AppleTalk Built-In

**$879**

### ML320/321

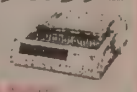


- 300 CPS
- Dot Matrix
- 9 Pin

**$319/429**

### ML590/591

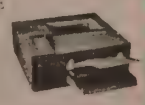
- 360CPS
- Dot Matrix
- 24 Pin
- Color Option



**$429/569**

### DOC IT

- ALL IN ONE
- 8PPM Laser
- FAX Mach'e
- Scanner
- Copier



CALL FOR DEMONSTRATION

## NEC

| | | | |
|---|---|---|---|
| NEC 2V 14" | 339 | NEC XP15 15"(NEW) | 659 |
| NEC 3V 15" | 479 | NEC XP17 17"(NEW) | 1250 |
| NEC 4FGE 15" | 629 | NEC XP21 21"(NEW) | 2439 |
| NEC 6FGP 21" | 1999 | | |
| NEC XE 15 15"(NEW) | 539 | **CD-ROM Drives** | |
| NEC XE 17 17"(NEW) | 1029 | Multispin 2VI/2V Deluxe | 179/299 |
| NEC XE 21 21"(NEW) | 2069 | Multispin 3XP Plus | 389 |
| | | Multispin 4XI/4XE | 389/485 |

| | | | | | |
|---|---|---|---|---|---|
| ThinkPad 360 | 170/340 | 1859/2239 | ThinkPad 755C 50MHz | 170/340 | 3269/3669 |
| ThinkPad 360CS | 170/340 | 2239/2559 | ThinkPad 755C 75MHz | 340/540 | 4219/4539 |
| ThinkPad 360C | 170/340 | 2239/2459 | ThinkPad 755CSE 100MHz | 540/810 | 4689/5069 |
| ThinkPad 360CE | 340/540 | 2899/3199 | ThinkPad 755CE 100MHz | 540/810 | 5629/6029 |
| ThinkPad 360CSE | 340/540 | 2629/2859 | ThinkPad 755CD 100MHz | 540/810 | CALL |

IBM Business Partner — Authorized Advanced Products Dealer

*Due to backorder status of some ThinkPads, Sign up for Back Order List.

# UNITEK™ computer stores

**W. LOS ANGELES**
12024 Wilshire Blvd.
West Los Angeles, CA 90025
**310 . 820 . 2400**
Fax . 310 . 826 . 1455

**ENCINO**
16027 Ventura Blvd.
Encino, CA 91436
**818 . 907 . 7878**
Fax . 818 . 907 . 7799

90 DAY Same As Cash Financing AVAILABLE

UNITEK is a Registered trademark of UNITEK COMPUTER STORES INC. GE Service Protection Plus™ is available to purchase for additional 3yr. warranty. DOS & Windows sold separately. All prices reflect cash discount. Limited time/qty. Intel is a registered trademark of the Intel Corporation.

# UNITEK™

computer stores

**FULL SERVICE CENTER** · Open Monday-Friday 9am-7pm/Saturday 10am-4pm

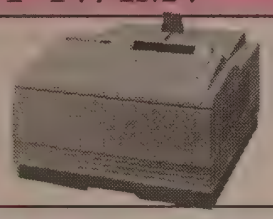
**W. LOS ANGELES**
12024 Wilshire Blvd.
West Los Angeles, CA 90025
310 . 820 . 2400
Fax . 310 . 826 . 1455

**ENCINO**
16027 Ventura Blvd.
Encino, CA 91436
818 . 907 . 7878
Fax . 818 . 907 . 7799

90 DAYS Same As Cash Financing AVAILABLE

## LASERJET 4V/4MV

- 16PPM Print Speed
- 600DPI Resolution
- 11 x 17 inch Capability



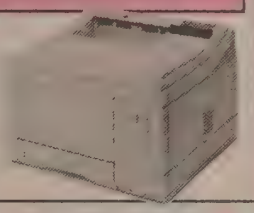
4V $1879 4MV $2699

## HEWLETT PACKARD

Authorized Reseller

## LASERJET 4+/4M+

- 12PPM Print Speed
- 600DPI Resolution
- Duplex Option



4 Plus $1378 4M Plus $1889

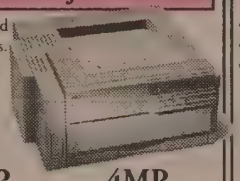
## LASERJET 4L/4ML

- 4PPM Speed
- 300 DPI Reg.
- Affordable printing

4L $CALL 4ML $969

## LASERJET 4P/4MP

- 4PPM Speed
- 600DPI Res.
- 45 Scalable Font



4P $928 4MP $1297

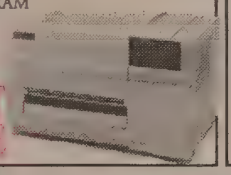
## LASERJET 4SI/4SI MX

- 17-PPM Speed
- 600 DPI Res
- For Departmental printing

4SI $2798 4SIMX $CALL

## COLOR LASERJET

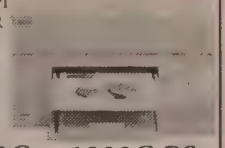
- 2CLR/10BLK PPM
- Color Laser Printing
- HP ColorSmart®
- 8MB STD RAM



$BEST PRICE

## DESKJET 1200C/1200CPS

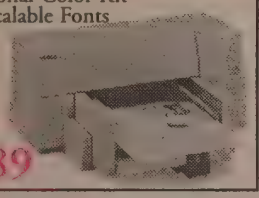
- 600x300 DPI
- 7BLK/2CLR PPM
- 16.7 Million Colors



1200C $979 1200C PS $1589

## DESKJET/DESKWRITER 540

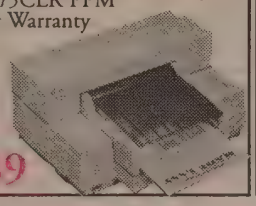
- 600x300 DPI
- Optional Color Kit
- 35 Scalable Fonts



$289

## DESKJET/DESKWRITER 560C

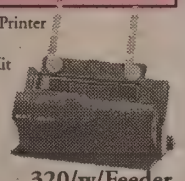
- 600x300 DPI
- 3BLK/5CLR PPM
- 3 Year Warranty



$489

## DESKJET/DESKWRITER 320

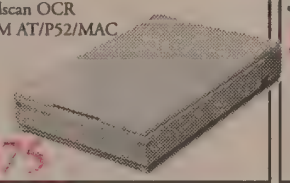
- Mobile Portable Printer
- 600x300 DPI
- Optional CLR Kit



320 $309 320/w/Feeder $359

## SCANJET 3P

- Flatbed Mono
- Up to 1200DPI
- Wordscan OCR
- F/IBM AT/P52/MAC

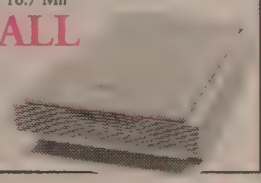


$475

## SCANJET IICX

- Flatbed Color & Mono Scanner
- Up to 1600 DPI
- 24 Bit, 16.7 Mil

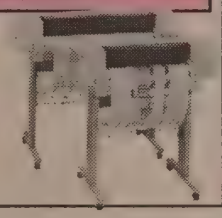
$CALL



## DESIGNJET 220 PLOTTER

- 600DPI Mono
- 2MB

Available D, E size



D-Size $2399
E-Size $3190

## DESIGNJET 600 PLOTTER

- 600 DPI Mono
- 4MB STD Memory
- Queuing, Nesting, Cutter

E-Size $4999

## DESIGNJET 650C/650CPS

- 600DPI Color
- Color Inkjet 4 Cart.
- FAST throughput

$BEST PRICE

AUTHORIZED DEALER & SERVICE PROVIDER

## TOSHIBA

BLOWOUT SALE

| | | |
|---|---|---|
| **T1910**<br>486SX-33, 4MB RAM<br>LCD VGA, Win, DOS, Trackball<br>NEW<br>200HD .....1299 | **T1910CS**<br>486SX-33, 4MB RAM<br>Passive Matrix Color, Win, DOS<br>200HD NEW...1769 | **T1960CS**<br>486SX2-50, Passive CLR, 4 MB, Ballpoint, DOS, Win<br>200HD .....1989<br>320HD .....2179 |
| **T1960CT**<br>486DX2-50, Active Color 4MB, Ballpoint, DOS, Win<br>200HD .....2499<br>320HD .....2645 | **T2400CS**<br>486DX2-50, Passive Matrix Color, 4MB Ram, MS Windows F/WorkGroups, Sound Option, Accupoint<br>250HD .....2399<br>320HD .....2539 | **T2450CT**<br>486DX4-75, Active Color, 8MB, Sound Option, Accupoint MS Windows F/WorkGroups<br>320HD .....3749<br>500HD .....4149 |
| **T3600CT**<br>486DX2-50, 8MB RAM, 1.44 ,WIN DOS Workgroups<br>NEW<br>250HD .....3329 | **T4850CT**<br>486DX4-75 Active CLR Screen, 8MB RAM, DOS, Win<br>520HD .....4399<br>810HD .....4589 | **T4900CT**<br>Pentium 75MHz processor 8MB Memory. 104" TFT Active Color. Multimedia Capabilities 6.9lbs.<br>810HD ..CALL |

## COMPAQ

AUTHORIZED DEALER & SERVICE CENTER

| | | |
|---|---|---|
| NEW **CONTURA 410C**<br>486DX2-50, 4MB Ram, Passive Matrix, DOS, WIN<br>350HD.....2299 | NEW **CONTURA 410CX**<br>486DX2-50, 4MB Ram, Active Matrix, DOS, WIN<br>350HD.....2759 | NEW **LTE ELITE 4/40C**<br>486DX2-40, 4MB RAM Passive Color, DOS, WIN<br>170HD.....2289 |
| **LTE ELITE 4/40CX**<br>486DX2-40, 4MB, ACTIVE MATRIX<br>170HD.....2839<br>340HD.....3189 | **LTE ELITE 4/50CX**<br>486DX2-50, 8MB RAM, ACTIVE TFT CLR, DOS, WIN<br>340HD.....4239 | **LTE ELITE 4/75CX**<br>486DX4-75, 8MB, ACTIVE MATRIX COLOR<br>340HD.....4629<br>510HD.....4899 |
| **CONTURA AERO 4/33C**<br>486dx-33, 4MB, ACTIVE MATRIX, NO Floppy<br>170HD.....1499<br>250HD.....1699 | **COMPAQ DESKTOPS & TOWERS**<br>Prolinea<br>Prolinea MT & XE<br>DeskPro<br>DeskPro XLITE<br>CALL for Configuration & Price | **COMPAQ SERVERS**<br>Proliant 1000<br>Proliant 2000<br>Proliant 4000<br>Prosignia Systems<br>CALL for Configuration & Price |

IBM is a registered trademark of International Business Machines Corporation
Thinkpad trademark of International Business Machines Corporation

*Price after rebate. Prices subject to change without notice. Limited time & quantity. OAC Ask for Details. Prices reflect cash discount.

Industry Insights *continued from page 14*

numbers like that, the losses from the AMD settlement seem paltry.

## Internet Insecurity In The News

It's clear that the mainstream press doesn't know what to do about the Internet. They vacillate between articles about how bright the future on the Information Superhighway will be and articles about how insecure the Internet is and therefore businesses won't touch it with a ten-foot pole. They seem to be equally unclear on both issues.

Last month, the big furor was about a "new" security hole in the Internet that let hackers and vandals break into systems on the Internet. Articles appeared in daily newspapers about a recent rash of break-ins based on a "recently discovered" method for getting around the Internet's security. Unfortunately, the articles were just plain wrong on many counts.

To spoil the not-so-exciting ending: The Internet is no less safe now than it was a few months ago. Hackers used methods that have been known for years to break into sites, then made it known that they know how to do it. A recent break-in was publicized by a government security agency, and the press assumed that it was a new method, even though the announcement specifically said that it wasn't.

In fact, the recent break-ins used two unrelated methods to gain access to machines. The initial entry is made using a technique called "IP spoofing." Using this method, a hacker or vandal can get as much access to files and programs as any user on the system. If the system is set up with little regard for security, the hacker or vandal can even gain complete control of the system.

The press accounts about the recent break-ins usually mentioned IP spoofing as if it were a new technique, when in fact it is well known in the Internet security field and has been described in technical papers and books for at least five years. Further, the media missed the big story on IP spoofing: It is easily prevented. A system that is broken into by someone using IP spoofing is simply a system with inadequate security that can be easily corrected.

IP spoofing is a method of sending a message to a computer that the computer's operating system thinks comes from a trusted computer, when in fact it comes from an adversary. Basically, the person breaking in creates a message, part of which says "I'm from a trusted computer," and requests access to the target computer. If the attacked computer is set up to allow access to other computers based on the supposed address of those computers, hackers or vandals can break in. You might have already guessed the best way to avoid the problem: don't allow access based on the supposed addresses, given how easily they can be faked.

There are additional, commonly used methods to prevent this kind of break-in. Assume that you have computers that need to allow the kind of access that is based on address, but all the trusted computers are


The #1 Source in the Valley!

STB Light Speed
Awesome 32 Bit Windows Accelerator
2 Megabytes of Fast DRAM
1280 x 1024 256c Non-Interlaced Resolution.
Up to 16.7 MILLION Colors @ 800x600!
72Hz Refresh! High Speed VL Configurations.
ATI Graphics Xpression $209
$179

Free! 2X CD-ROM & 16 Bit Sound Card!!
Buy MS Office Profssional 4.3 and get a Double Speed CD-ROM Drive (320ms 300kb/sec)!
Sound Blaster 16 stereo, CD quality, Sound card!
Includes Microsoft Encarta too!
Teac 4xi with SB 16 & Speakers $299
$499

Mag DX17F
Best Priced 17" Monitor in its class
1280 x 1024 NI Res. .26mm dp
Flat Screen. 100MHz Bandwidth
Full Digital Controls & Display!
Bundled with the STB Lightspeed SuperVGA VL Bus Video Card!
Mag DX15F $325
$799

Multimedia
Sound Blaster 16 Value Edition ONLY $99!!
Logitech Soundman Wave ONLY $119!!
Sound Blaster 32 Value Ed. ONLY $225!!
While Supplies Last

Conner Tapestor 420Mb Tape Drive
Up to 420Mb on QIC-Wide Tapes
Uses Existing Floppy Controller
3.5" or 5.25" Drive Size
QIC-80 & Irwin Compatible
Full Featured DOS & Windows Software
Tapestor 850Mb $269
$169

Clearance
28.8k Int. V.Fast Fax/Modem ONLY $99!!
Cardinal 19.2K Bps Fax/Modem! ONLY $59!!
Corel Draw 4-5 Upgrd ONLY $159!!
While Supplies Last

Video Boards
ATI Graphics Pro Turbo 2mb $379
Hercules Dynamite VLPro 1mb $149
Cirrus Logic 5428 w/1MB VLB $79
Trident 8900D w/1MB ISA $69
DIAMOND · STB · HERCULES
ORCHID · NUMBER NINE · MATROX
Controller Cards
DTC 2280 ISA IDE w/IO $19
DTC 2278 VLB IDE w/IO $29
DTC 2130 PCI IDE $39
Promise 2300 VLB Fast ATA IDE $59
DPT · ADAPTEC · PROMISE· QLOGIC
ACCULOGIC · FUTURE DOMAIN · DTC

Hard Drives
270MB IDE $159
420MB IDE $189
540MB IDE $219
850MB IDE $299
1 Gig IDE $399
Fax/Modems
U.S. Robotics 14.4k Int $99
Cardinal Wintel 19.2k int $59
U.S. Robotics 14.4 Ext $119
Best Data 14.4k Int. $69
U.S. Robotics 28.8k V.34 Int $225
Networking
Novell Certified Staff Available

Multi-Media
Creative Labs
Sound Blaster 16 Value $98
Discovery CD16 Kit $259
Digital Schoolhouse CD 16 Kit $279
TOSHIBA
Toshiba 3501 Quad Speed $289
NEC · PLEXTOR · MITSUMI · WEARNES
AZTECH · SONY · DIAMOND · TEAC
Monitors
KFC 14" 1024x768NI $225
KFC 15" 1280x1024NI $315
SONY · MITSUBISHI · VIEWSONIC
NEC · NOKIA · CTX · SAMTRON

WE CARRY IT ALL!
22129 Sherman Way
Canoga Park, CA 91303 (818) 347-8324
Monday - Friday 10am-6pm Saturday 10am-3pm
Prices quoted based on 3% cash discount.
Pricing and availability subject to change without notice.

R-TECH
Computer Sales & Service
(818) 34R-TECH
(818) 347-8324

# When You Buy From USA Systems You Buy Quality

## PCI DREAM MACHINE

- Pentium Motherboard made by Intel Corp.
- 16MB (70ns) RAM & 256K Writeback Cache
- 1.08GB Super Fast IDE Hard Drive
- One Floppy Drive (3.5" or 5.25")
- PCI Enhanced IDE Controller
- 15" Flat Screen Super VGA Monitor
- PCI Diamond Stealth 64/2MB VRAM
- 2 Serial, 1 Parallel & 1 Game Ports
- Medium Tower or Desktop Case
- 101 Enhanced Keyboard
- Serial Mouse w/ Pad

intel inside

| | |
|---|---|
| 486DX2-66 | $2045 |
| 486DX4-100 | $2150 |
| PENTIUM-66 | $2316 |
| PENTIUM-75 | $2438 |
| PENTIUM-90 | $2738 |
| PENTIUM-100 | $2828 |

## MULTIMEDIA BEST BUY

- Pentium Motherboard Made by Intel Corp.
- 8MB (70ns) RAM & 256K Cache
- Quad Speed CD ROM
- Sound Blaster 16 Bit Sound Card
- 2 Amplified Stereo Speakers & 4 Top CD Titles
- 540MB Enhanced IDE Hard Drive
- One Floppy Drive (3.5" or 5.25")
- PCI/VLB Enhanced IDE Hard Drive Controller
- PCI/VLB Diamond Stealth 64 (1MB DRAM)
- 15" Flat Screen Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- Mini Tower or Desktop Case
- 101 Enhanced Keyboard
- Serial Mouse w/Pad

intel inside

| | |
|---|---|
| 486DX2-66 VLB | $1782 |
| 486DX4-100 PCI | $1862 |
| PENTIUM-66 PCI | $2035 |
| PENTIUM-90 PCI | $2457 |

All systems come with One Year Parts and Labor Warranty.

All systems come with One Year Parts and Labor Warranty.

### MOTHERBOARDS (OK + CPU)

PC VLB MB 486SX-25/0K/3 VLB/ZIF/4 X 30 PIN + 2 X 72 PIN ..... $169
PC VLB MB 486SX-33/0K/3 VLB/ZIF/4 X 30 PIN + 2 X 72 PIN ..... 188
IBM OPAL VLB 486SLC2-66/64K/MATH/2 VLB ..... 165
IBM VLB 486DLC3-75/256K/MATH/ENHANCED IDE IO ..... CALL
PC VLB ISA MB 486DX2-66/256K/3 VLB/ZIF/4 X 30 + 2 X 72 PIN ..... 287
SIS VLB ISA MB 486DX2-66/256K/3 VLB/GREEN/ ZIF/4 X 72 PIN ..... 297
PC VLB ISA AMD 486DX4-100/256K/3 VLB/ZIF/4 X 30 + 2 X 72 ..... 329
UMC PCI/ISA/VLB AMD 486DX2-66/256K/72P ..... 307
UMC PCI/ISA/VLB AMD 486DX4-100/256K (512K)/72P ..... 355
SIS/OPTI PCI ISA PENTIUM-60 (66)/256K/72P/FAN ..... 545
INTEL MADE PENTIUM-60 (66)/256K/FAN/IDE IO/72P ..... 656
INTEL MADE PENTIUM-75/256K/IDE IO ..... 735
SIS/OPTI PCI ISA PCI ISA PENTIUM-90/256K/72P/FAN ..... 806
INTEL PLATO PCI ISA PENTIUM-90/256K/72P/IDE IO ..... 965
INTEL PLATO PCI ISA 90MHz/256K/IDE IO ..... 1125
PCI EISA PENTIUM-90 DUAL PROCESSOR, 4 PCI/4 EISA/1 CPU ..... 1275

### VIDEO CARDS

CIRRUS LOGIC 5401 16 BIT/800 X 600/256K ..... $24
TRIDENT 9000 SVGA 16 BIT/1024 X 768/512K ..... 35
TRIDENT SVGA 8900-X 16 BIT/1280 X 1024/1MB ..... 52
CIRRUS LOGIC/5428 VLB/1MB/2MB DRAM ..... 67/114
DIAMOND SPEEDSTAR PRO SE 1MB/2MB DRAM (OEM) ..... 105/145
DIAMOND STEALTH 64 VLB/1MB/2MB DRAM (OEM) ..... 138/184
DIAMOND STEALTH 64 VLB/2MB/4MB VRAM (OEM) ..... 275/415
DIAMOND VIPER SE VLB 2MB/4MB VRAM (OEM) ..... 270/405
ATI GRAPHICS WINBOOST VLB-64 1MB/2MB DRAM ..... 149/189
ATI GRAPHICS WINBOOST VLB-64 2MB/4MB VRAM ..... 265/465
TRIDENT 9440 PCI 1MB/2MB DRAM ..... 70/115
DIAMOND STEALTH 64 PCI, 1MB/2MB DRAM (OEM) ..... 135/181
DIAMOND STEALTH 64 PCI, 2MB/4MB VRAM (OEM) ..... 271/415
DIAMOND VIPER SE, 2MB/4MB VRAM (OEM) ..... 270/405
ATI GRAPHICS WINTURBO PCI-64 1MB/2MB DRAM ..... 139/179
ATI GRAPHICS WINTURBO PCI-64 2MB/4MB VRAM ..... 255/455

### CONTROLLER CARDS

IDE CTRL WITH IO (2H/2F/2S/PG) ..... $13
AT HIGH SPEED IO W/IDE (5100AT) ..... 28
VLB HIGH SPEED IO W/ENHANCED IDE (5100VL) ..... 40
VLB ENHANCED IDE IO (SIS/GS) ..... 23
VLB ENHANCED IDE IO (HOTEK/UMC) ..... 19
VLB DTC2278D IDE IO (MODE 4) ..... 28
ADAPTEC 16 BIT SCSI-II CTRL CARD (BARE) ..... 196
ADAPTEC 16 BIT SCSI-II CTRL W/KITS ..... 250
ADAPTEC 1542CFK PLUS COREL-DESIGNED SCSI SOFTWARE ..... 295
ADAPTEC EISA SCSI-II CTRL CARD (BARE) ..... 350
ADAPTEC EISA SCSI-II CTRL W/KITS ..... 390
ADAPTEC 2742TK PLUS COREL-DESIGNED SCSI SOFTWARE ..... 460
ADAPTEC VLB SCSI-II CTRL (BARE) ..... 205
ADAPTEC VLB SCSI-II CTRL W/KITS ..... 235
ADAPTEC PCI SCSI-II (BARE) ..... 215
ADAPTEC PCI FSCSI-II CTRL W/KIT (OEM PKG) ..... 215
ADAPTEC PCI FSCSI-II CTRL W/KIT (ORIGINAL PKG) ..... 295
ADAPTEC PCI WIDE SCSI-II (W/KIT) OEM PKG ..... 285

### I/O CARDS

AT I/O 2S/1P/1G ..... $11
HIGH SPEED AT IO (2S/P) 16550 CHIPS ..... 26
PRINTER CARD ..... 11
PRINTER CARD (UP TO 2 PORTS) ..... 13
2 PRINTER PORT CARD ..... 19
RS-232 SERIAL CARD (2 SERIAL PORTS) ..... 12
4 PORT XENIX/UNIX SERIAL CARD ..... 55
4 PORT XENIX/UNIX SERIAL CARD W/16550 CHIPS ..... 95

### FLOPPY DISK DRIVES

TEAC 1.2MB BEIGE ..... $42
MITSUMI 1.2MB BEIGE ..... 36
TEAC 1.44MB BEIGE WITH KITS ..... 35
MITSUMI 1.44MB BEIGE WITH KITS ..... 33
TEAC 2.8MB 3.5" FLOPPY DRIVE ..... 90
TEAC 1.2 & 1.44MB DUAL FLOPPY DRIVE ..... 109

### HARD DISK DRIVES

**CONNER**

CONNER 420MB/13MS/64K IDE ..... $182
CONNER 540MB/12MS/256K IDE ..... 215
CONNER 850MB/12MS/256K IDE-3 ..... 310
CONNER 1.06GB/9.5MS/512K FS2 ..... 460

**WESTERN DIGITAL**

WD 425MB/13MS/128K IDE ..... $185
WD 540MB/11MS/128K IDE ..... 215
WD 850MB IDE ..... 300
WD 1.08GB IDE ..... 395
(3 YEARS MANUFACTURER WARRANTY)

**MICROPOLIS**

MICROPOLIS 1.7GB/10MS/3.5" SCSI-II ..... $855
MICROPOLIS 2.0GB/8.5MS SCSI-II ..... 995/1105
MICROPOLIS 4.03GB/8.5MS/3.5" SCSI-II ..... 1605/2275
MICROPOLIS 9.0GB/8.5MS/SCSI-II ..... 2965
MICROPOLIS 2.0GB WIDE SCSI ..... 1115
MICROPOLIS 4.03GB WIDE SCSI ..... 1705
(5 YEARS MANUFACTURER WARRANTY)

### KEYBOARDS

MITSUMI 101K KEYBOARD ..... $24
FOCUS 101K KEYBOARD WITH DUST COVER ..... 32
FOCUS 102K KEYBOARD ..... 26
FOCUS 111K KEYBOARD W/CALCULATOR ..... 40
FOCUS 130K PROGRAMMABLE KB W/CALCULATOR ..... 55
KEYTRONIC 101K KEYBOARD ..... 27
FUJITSU 101K KEYBOARD ..... 41
LITEON 101K KEYBOARD (HONEYWELL OEM) ..... 33

### MONITORS

KFC 9" MONO AMBER ..... $115
KFC 9" MONO VGA PAPER WHITE ..... 145
BTC 14" MONO PAPER WHITE MONITOR ..... 86
BTC 14" SVGA MONO MONITOR ..... 109
CTX 14" SVGA 1024 X 768 .39 DP ..... 205
CTX 14" SVGA 1024 X 768 .28 DP ..... 228
CTX 14" SVGA 1024 X 768 .28 DP NI FULL SCREEN ..... 238
CTX 15" SVGA FLAT SCREEN NI ..... 335
CTX 17" SVGA FLAT SCREEN NI ..... 628
CTX 17" ..... 685
MAG 15" MONITOR ..... 345
MAG 17" MONITOR ..... 539
MAG 17" MONITOR ..... 895
MAG 21" MONITOR ..... 1650
*PLEASE CHECK REBATE PROGRAM FOR MXP17F & MX21F
VIEWSONIC 14" .28 DP 1024 X 768 NI ..... 269
VIEWSONIC 15" .28 DP 1280 X 1024 60Hz LR, FLAT ..... 415
VIEWSONIC 15" .28 DP ..... 355
VIEWSONIC 17" 17E ..... 720
VIEWSONIC 17" 17G ..... 750
VIEWSONIC 17" ..... 835
VIEWSONIC 20" .28 DP 1600 X 1280 NI, 76Hz LR ..... 1450
VIEWSONIC 21" .25 DP 1600 X 1280 NI, 76Hz LR, FLAT ..... 1666

### CASE AND POWER SUPPLIES

SUPER SLIM CASE W/65W (2 X 3.5") & DOOR, NO DISPLAY (L/W/H=15 X 13.75 X 3) ..... $76
DESKTOP CASE W/200W (3 X 5.25", 2 X 3.5") WITH DISPLAY ..... 59
MINI TOWER CASE W/200W (2 X 5.25", 1 X 3.5", 1 X 3.5") W/DISPLAY ..... 39
MEDIUM TOWER CASE W/230W (3 X 5.25", 2 X 3.5", 1 X 3.5") W/DISPLAY ..... 55
FULL TOWER CASE W/250W (4 X 5.25", 2 X 5.25") W/DISPLAY ..... 69
EUROPEAN STYLE MINI TOWER CASE W/230W (2 X 5.25", 3 X 3.5") W/3 DIGIT ..... 45
EUROPEAN STYLE DESKTOP CASE W/230W (3 X 5.25", 4 X 3.5") W/3 DIGIT ..... 49
EUROPEAN STYLE MEDIUM TOWER W/250W (3 X 5.25", 5 X 3.5") W/3 DIGIT ..... 65
EUROPEAN STYLE FULL TOWER W/250W (3 X 5.25", 5 X 3.5") W/3 DIGIT ..... 79
SUPER SERVER CASE W/300W 12 BAYS, 3 FANS, DOOR (H/W/D = 580 X 280 X 440mm, BLACK COLOR ALSO AVAILABLE) ..... 375

### PRINTERS

HP DESKJET 540 PRINTER ..... $282
HP DESKJET 560C COLOR PRINTER ..... 457
HP DESKJET 1200C ..... 1265
HP DESKJET 1200C PLUS ..... 2043
HP LASERJET 4L/4ML WITH TONER ..... 515/935*
HP LASERJET 4+/4M+ WITH TONER ..... 1365/1845
HP LASERJET 4P/4MP WITH TONER ..... 895/1285
HP LASERJET 4V PRINTER W/TONER ..... 1875
HP 4SI LASER PRINTER ..... 2795
HP SCANJET IICX SCANNER ..... 725*
(*AFTER REBATE)
PRINTER CABLE 6 FT. ..... 5
PRINTER CABLE 10 FT. ..... 10
PRINTER CABLE 15 FT. ..... 15
PRINTER CABLE 25 FT. ..... 20

### MULTIMEDIA

SONY 55E 2X 250MS INTERNAL CD ROM (IDE) ..... $123
TOSHIBA 3501 SCSI INT. QUAD SPEED ..... 285
NEC CDR510 INT. 3X SPEED SCSI (OEM PKG) W/CABLES ..... 270
MITSUMI QUAD SPEED (IDE) ..... 195
PLEXTOR 4 PLEX QUAD SPEED 150MS (BARE) ..... 419
TEAC QUAD SPEED (AT) CD ROM (BARE) ..... 199
SPECIAL!
MITSUMI FX400 QUAD SPEED CD ROM (BARE) ..... @ $173/100 pcs.
CD-PAK EUREKA PAK ..... @ $33/10 SETS
CD-PAK WIN-WIN II ..... @ $32/10 SETS
CD-PAK PREMIUM PAK ..... @ $29/10 SETS
CD-PAK LEGEND PAK ..... @ $29/10 SETS
CD-PAK DISCOVERY PAK ..... @ $29/10 SETS
CD-PAK MEDIA WONDER ..... @ $29/10 SETS
CREATIVE LAB SOUND BLASTER 16 ASP SCSI-II ..... $205
CREATIVE LAB SOUND BLASTER 16 ASP MCD ..... 175
CREATIVE LAB SOUND BLASTER 16 MCD (OEM) ..... 77
CREATIVE LAB SOUND BLASTER 16 SCSI (OEM) ..... 110
CREATIVE LAB SOUND BLASTER AWE32 (32 BIT) ..... 268
OPTI SOUNDS EASY PRO 16 16 BIT SOUND CARD ..... 75
CREATIVE LAB DIGITAL SCHOOL HOUSE (16 MCD, DOUBLE SPEED CD ROM, SPEAKERS, 22 CD TITLES) ..... 265

### NETWORK PRODUCTS

8 BIT ARCNET BNC + TP ..... $41
8/16 BIT AUTO-SELECT, BNC ONLY, BUS ..... 36
8/16 BIT AUTO-SELECT, BNC ONLY, STAR ..... 35
BOOT ROM ..... ADD $11
16 BIT ARCNET, BNC + TP FOR TWISTED PAIR CABLE ..... 46
ARCNET 8 PORTS ACTIVE HUB, BUS/STAR, COAXIAL CABLE ..... 99
ARCNET 8 PORTS ACTIVE HUB, TWISTED PAIR ..... 140
ARCNET 4 PORTS PASSIVE HUB ..... 11
ARCNET 4 PORTS ACTIVE HUB CARD, TP ..... 87
8 PORTS ETHERNET HUB (AUI/BNC/8RJ45) STANDARD ..... 145
8 PORTS ETHERNET HUB (8RJ45 + 1BNC) SMALL SIZE ..... 119
12 PORTS ENET HUB (1BNC + 1AUI + 12TP) 1 DEDICATE ..... 275
12 PORTS ENET HUB (1BNC + 1AUI + 12TP) ..... 390
12 PORTS ENET HUB (1BNC + 1AUI + 12TP, STACKABLE) ..... 680
16 PORTS (BNC/AUI/IEEE 802.3/INT. PS/19" STANDARD) ..... 279
16 PORTS ETHERNET CONCENTRATOR TW ..... 375
16 BIT ENET COMBO (RJ45/BNC) JUMPERLESS ..... 34
16 BIT ENET (RJ45/BNC/AUI) ..... 39
32 BIT EISA ENET (AUI/BNC/TP) 3-IN-1 COMBO ..... 195
32 BIT VLB ENET (AUI/BNC/TP) ..... 195
D-LINK PCI ENET W/BNC, 10BT & AUI PORTS ..... 145
PCI ENET COMBO JUMPERLESS ..... 105
ARTISOFT LANTASTIC/AI V 6.0 FOR DOS/WINDOWS ..... 70
ARTISOFT LANTASTIC V 6.0 5 USER ..... 305
NOVELL NETWARE 386 V.3.12 5 USER ..... 540
NOVELL NETWARE 386 V.3.12 10 USER ..... 1150
NOVELL NETWARE 386 V.3.12 25 USER ..... 1650
NOVELL NETWARE 386 V.3.12 50 USER ..... 2000
NOVELL NETWARE 386 V.3.12 100 USER ..... CALL
NOVELL NETWARE 386 V.4.1 5 USER OEM ..... 495
NOVELL NETWARE 386 V.4.1 10 USER (CD ROM) ..... 1090
NOVELL NETWARE 386 V.4.1 25 USER (CD ROM) ..... 1650
NOVELL NETWARE 386 V.4.1 50 USER (CD ROM) ..... 2100
NOVELL NETWARE 386 V.4.1 100 USER (CD ROM) ..... CALL
NOVELL PERSONAL NETWARE V.1.0 ..... 45
NOVELL NETWARE LITE V.1.1 ..... 39
WINDOWS FOR WORKGROUP-FULL VERSION ..... 65
WINDOWS FOR WORKGROUP- ADD ON VERSION ..... 55
* ALL BY OEM PACKAGE

### NETWORKING ACCESSORIES

25 FT. RG-58 CABLE WITH CONNECTOR ..... $15
50 FT. RG-58 CABLE WITH CONNECTOR ..... 25
RG-58 T-CONNECTOR ..... 2.50
RG-5850 OHM TERMINATOR ..... 3

### MISCELLANEOUS

LOGITECH MOUSEMAN SERIAL ..... $49
LOGITECH MOUSEMAN PS/2 VERSION ..... 49
A4 MOUSE SERIAL 3 BUTTONS/PAD ..... 14
MICROSOFT SERIAL MOUSE (OEM PKG) ..... 35
MICROSOFT BUS MOUSE (OEM PKG) ..... 55

### FAX/MODEM

2400 BPS W/IRQ 2,3,4,5 DIP-SWITCH SETTINGS ..... 29.50
9600SR/2400 FAX MODEM INTERNAL ..... 45
9600SR/2400 RECORD/PLAYBACK/VOICE MESS. AUDIO DETECT VOICE FAX/FAX ON DEMAND/1000 MAIL BOXES ..... 65
14.4SR V.17/14.4 V.32BIS/V.42BIS/MNP5 RECORD/PLAYBACK VOICE MESSAGES, AUTO DETECT VOICE/FAX/DATA, FAX-ON-DEMAND, PAGER NOTIFICATION, SPEAKER JACK, 1000 MAIL BOXES, 16550 UART ..... 125
14.4SR V.17/14.4 V.32BIS/V.32/V.42BIS/MNP5, 16550 UART AUTO FALLBACK FOR DATA/FAX CONN., AT&T CHIPS, UP TO 57.6KBPS THROUGHPUT ..... 90
14.4SR V.17/14.4 V.32BIS/V.32/V.42BIS/MNP5 MODEM, UPGRADABLE TO 19.2KBPS, 16550 UART, AT&T CHIP ..... 105
EXTERNAL TYPE OF 1914BAT ..... 135
EXTERNAL TYPE, SPEC AS 1914BAT UPGRADABLE TO 19.2KPS ..... 145
POCKET 14.4SR FAX V.17/14.4 V.32BIS/V.32/V.42BIS/MNP5 MODEM ..... 159
28.8 INTERNAL/EXTERNAL FAX MODEM ..... 198/218
SPORTSTER 28.8 FAX/DATA MODEM INT/EXT ..... 175/189
COLORADO TRAKKER 120MB EXTERNAL TAPE BACKUP ..... 220
COLORADO TRAKKER 250MB EXTERNAL TAPE BACKUP ..... 285
COLORADO TRAKKER 350MB EXTERNAL TAPE BACKUP ..... 325
COLORADO 120MB TAPE BACKUP ..... 125
COLORADO 250MB TAPE BACKUP (OEM) ..... 160
COLORADO 350MB TAPE BACKUP ..... 185
CONNER 250MB TAPE BACKUP W/FREE 3M TAPE ..... 150
CONNER 250MB EXTERNAL PARALLEL BACKUP ..... 338
COLORADO EXTERNAL ADAPTER KIT ..... 32
COLORADO EXTERNAL DRIVE KIT ..... 70
COLORADO 500KBS/1MB ADAPTER KIT ..... 78
COLORADO DATA COMPRESSION ADAPTER KIT ..... 75
COLORADO DATA CABLE (3 CONN. FOR 2 FDD) ..... 11
COLORADO POWER TAPE 1.0GB BACKUP INTERNAL ..... 608
*CARTRIDGE FOR PT10 ..... 35
COLORADO POWER TAPE 2.0GB BACKUP INT./EXT. ..... 949/1099
COLORADO POWER TAPE 4.0GB BACKUP INT.EXT. ..... 1179/1399
CARTRIDGE FOR PT50(E) ..... 65
COLORADO DATA 5000 4GB INT. ..... 1179
40MB/80MB/120MB MINI DATA CARTRIDGE (PREFORMATTED) ..... 16
80MB/160MB/240MB MINI DATA CARTRIDGE (PREFORMATTED) ..... 18
VOLUME ORDER DISCOUNTS AVAILABLE, CALL US NOW!

All Systems Come With One Year Parts and Labor Warranty.

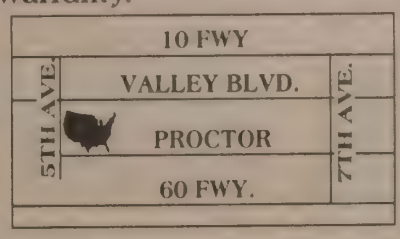
**210 S. 5th Ave., City of Industry, CA 91746**

**Tel. (818) 336-6366**

**Fax (818) 336-7996**

**Dealers Welcome · Additional Discounts Available**

VISA MasterCard AMERICAN EXPRESS UPS




Price, specifications and availability are subject to change without notice. Brand names are registered trademarks of their respective companies.

## PENTIUM 90MHZ Multimedia System

**(5549SM-Silver Series)**

- Tower Case w/LED
- PENTIUM DX 90MHZ CPU (INTEL)
- PCI Motherboard w 256k SRAM Cache
- 8 Megabytes RAM
- 850 Meg IDE Hard Drive 10ms Access
- 15" SVGA Monitor N.I. .28Dot
- PCI 64-Bit Video Card w/ 1Meg
- PCI 64-Bit IDE Controller Card
- 3.5" 1.44 Floppy Drive
- 101 AT Spill Proof Keyboard
- Hi-Res Mouse & Mouse Pad
- 2X Dual Spin CD ROM Drive
- Sound Blaster 16 Sound Card
- 40W Powered Stereo Speakers
- 14.4k Data/Fax Modem
- 2 Serial / 1 Parallel / 1 Game Port
- Free Trial Prodigy / Amer. On-Line / Compuserve
- MS DOS 6.22 & MS Windows 3.1 Manuals & Registration

PENTIUM POWER

**$2089**

only $59 /mo.*

## PENTIUM 60MHZ Multimedia System

**(5814-AWE-Platinum Series)**

- Tower Case w/LED
- PENTIUM DX-60MHZ CPU (INTEL)
- PCI Motherboard w/256k SRAM Cache
- 8 Megabytes RAM
- 1.0 Gigabyte Hard Drive 10ms Access
- 15" SVGA Monitor N.I. .28Dot
- PCI 64-Bit Video Card w/ 1Meg
- PCI 64-Bit IDE Controller Card
- 3.5" 1.44 Floppy Drive
- Focus 8000 Keyboard w/ Calculator
- Hi-Res Mouse & Mouse Pad
- 4X Quad Spin CD ROM Drive
- Sound Blaster AWE 32 Sound Card
- Advanced WaveEffects Synthesis
- 140W Hi-Fi Stereo Speakers
- 28.8k Data/Fax Modem
- 2 Serial / 1 Parallel / 1 Game Port
- Free Trial Prodigy / Amer. On-Line / Compuserve
- MS DOS 6.22 & MS Windows 3.1 Manuals & Registration

POWER SPIN POWER

**$2289**

only $64 /mo.*

## PENTIUM 90MHZ Multimedia System

**(5114-AWE-Platinum Series)**

- Tower Case w/LED
- PENTIUM DX-90MHZ CPU (INTEL)
- PCI Motherboard w/ 256k SRAM Cache
- 16 Megabytes RAM
- 1.0 Gigabyte Hard Drive 10ms Access
- 15" SVGA Monitor N.I. .28Dot
- PCI 64-Bit Video Card w/ 2Meg
- PCI 64-Bit IDE Controller Card
- 3.5" 1.44 Floppy Drive
- Focus 8000 Keyboard w/ Calculator
- Hi-Res Mouse & Mouse Pad
- 4X Quad Spin CD ROM Drive
- Sound Blaster AWE 32 Sound Card
- Advanced WaveEffects Synthesis
- 140W Hi-Fi Stereo Speakers
- 28.8k Data/Fax Modem
- 2 Serial / 1 Parallel / 1 Game Port
- Free Trial Prodigy / Amer. On-Line / Compuserve
- MS DOS 6.22 & MS Windows 3.1 Manuals & Registration

POWER SPIN POWER

**$2979**

only $84 /mo.*

# EZiest Way To Buy A PC.

## 486DX/2 66MHZ Multimedia System

**(Gold Series)**

- Tower Case w/LED
- 486DX/2 66MHZ CPU (INTEL)
- 486 VLB Motherboard 256k SRAM Cache
- 8 Megabytes RAM
- 540 Meg Hard Drive 12ms Access
- 15" SVGA Monitor N.I. .28Dot
- 32-Bit VLB Card w/ 1MEG
- 32-Bit VLB Enhanced Controller Card
- 3.5" 1.44 Floppy Drive
- 101 AT Spill Proof Keyboard
- Hi-Res Mouse & Mouse Pad
- 2X Dual Spin CD ROM Drive
- Sound Blaster 16 Sound Card
- 100W Hi-Fi Stereo Speakers
- 14.4k Data/Fax Modem
- 2 Serial / 1 Parallel / 1 Game Port
- Free Trial Prodigy / Amer. On-Line / Compuserve
- MS DOS 6.22 & MS Windows 3.1 Manuals & Registration
- COLOR INKJET PRINTER w/ Free Cable

COLOR INKFET PRINTER INCLUDED

**$1799**

only $50 /mo.*

## 486DX/2 66MHZ Multimedia System

**(4854 BPM-Silver Series)**

- Tower Case w/LED
- 486DX/2 66MHZ CPU (INTEL)
- 486 VLB Motherboard 256k SRAM Cache
- 8 Megabytes RAM
- 850 Meg IDE Hard Drive 10ms Access
- 15" SVGA Monitor N.I. .28Dot
- 32-Bit VLB Video Card w/ 1MEG
- 32-Bit VLB Controller Card
- 3.5" 1.44 Floppy Drive
- 101 AT Spill Proof Keyboard
- Hi-Res Mouse & Mouse Pad
- 4X Quad Spin CD ROM Drive
- Sound Blaster 16 Sound Card
- Dual Stereo Speakers
- 14.4k Data/Fax Modem
- 2 Serial / 1 Parallel / 1 Game Port
- Free Trial Prodigy / Amer. On-Line / Compuserve
- MS DOS 6.22 & MS Windows 3.1 Manuals & Registration

FAMILY PACK

**$1599**

only $45 /mo.*

## 486DX/2 66MHZ D-WORKSTATION

**(Bronze Series)**

- Tower Case w/LED
- 486DX/2 66MHZ CPU (INTEL)
- 486 VLB Motherboard 256k SRAM Cache
- 4 Megabytes RAM
- 540 Meg Hard Drive 12ms Access
- 14" SVGA Monitor N.I. .28Dot
- 32-Bit VLB Card w/ 1Meg
- 32-Bit VLB Enhanced Controller Card
- 3.5" 1.44 Floppy Drive
- 101 AT Spill Proof Keyboard
- Hi-Res Mouse & Mouse Pad
- 2 Serial / 1 Parallel / 1 Game Port
- MS DOS 6.22 & MS Windows 3.1 Manuals & Registration

- Optional : Multimedia Package - Add only $265
  - Sound Blaster 16
  - 2x Dual Spin CD ROM Drive
  - Dual Stereo Speakers
  - MS Encarta, MS Money, MS Works, MS Entertainment Pack

VALUE PACK

**$999**

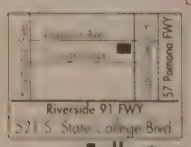
only $28 /mo.*

## NOTEBOOK SPECIALS

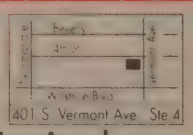
Canon
EPSON
OPTIQUEST
ViewSonic
novacomm

| MODEL | SCREEN | HARD DRIVE | 486 DX-33 | 486 DX2/66 | 486 DX4/100 |
|---|---|---|---|---|---|
| 700 AMC | ACTIVE COLOR 9.4" | 250 MB HDD | $2,895.00 | $2,995.00 | $3,249.00 |
| 700 AMC | ACTIVE COLOR 9.4" | 340 MB HDD | $2,949.00 | $3,059.00 | $3,319.00 |
| 700 AMC | ACTIVE COLOR 9.4" | 540 MB HDD | $3,189.00 | $3,229.00 | $3,599.00 |
| 700 DSC | DUAL SCAN COLOR | 250 MB HDD | $2,095.00 | $2,149.00 | $2,439.00 |
| 700 DSC | DUAL SCAN COLOR | 340 MB HDD | $2,179.00 | $2,247.00 | $2,548.00 |
| 700 DSC | DUAL SCAN COLOR | 540 MB HDD | $2,395.00 | $2,445.00 | $2,789.00 |

Canon
EPSON
OPTIQUEST
ViewSonic
novacomm




MAINSTORE **Fullerton**
TEL. (714) 447-3955
FAX (714) 447-3945




**Los Angeles** BRANCH
TEL. (213) 380-4431
FAX (213) 380-3974

# EZ COMPUTER

* On Approved Credit O.A.C. All prices reflects CASH DISCOUNT Not responsible for typographical errors Prices Subject to Change w o Notice

0% INTEREST FOR 90 DAYS

Business Hours
Mon.-Sat.
10 A.M.- 6 P.M.

VISA

Industry Insights *continued...*

# MicroTimes Index Begins '95 In Bullish Fashion

| EXCH | COMPANY | | TICKER SYMBOL | CLOSING PRICE 01/18/95 | CLOSING PRICE 02/16/95 | NET CHANGE IN PERIOD | PERCENT CHANGE IN PERIOD | P/E RATIO | ANNUAL DIVIDEND RATE | ANNUAL DIVIDEND YIELD | ANNUAL HIGH | ANNUAL LOW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SOFTWARE | | | | | | | | | | | |
| OTC | Adobe | | ADBE | 32.31 | 34.50 | 2.19 | 6.77 | 138 | 0.20 | 0.58 | 38.50 | 21.50 |
| OTC | Autodesk | | ACAD | 37.50 | 36.00 | -1.50 | -4.00 | 27 | 0.24 | 0.67 | 41.50 | 23.25 |
| OTC | Borland | | BORL | 7.75 | 7.63 | -0.13 | -1.61 | - | 0.00 | 0.00 | 15.13 | 6.00 |
| OTC | Informix | (H) | IFMX | 33.00 | 36.50 | 3.50 | 10.61 | 37 | 0.00 | 0.00 | 38.75 | 14.25 |
| OTC | Lotus | | LOTS | 43.00 | 46.75 | 3.75 | 8.72 | - | 0.00 | 0.00 | 86.50 | 29.75 |
| OTC | Microsoft | (H) | MSFT | 65.06 | 60.88 | -4.19 | -6.44 | 29 | 0.00 | 0.00 | 65.25 | 39.13 |
| OTC | Novell | | NOVL | 17.88 | 20.06 | 2.19 | 12.24 | 33 | 0.00 | 0.00 | 26.63 | 13.38 |
| OTC | Oracle | | ORCL | 43.25 | 46.13 | 2.88 | 6.65 | 40 | 0.00 | 0.00 | 46.50 | 26.25 |
| OTC | Software Publishing | | SPCO | 5.00 | 4.25 | -0.75 | -15.00 | - | 0.00 | 0.00 | 7.63 | 3.00 |
| OTC | Symantec | (H) | SYMC | 20.38 | 21.13 | 0.75 | 3.68 | 29 | 0.00 | 0.00 | 21.50 | 9.88 |
| | HARDWARE | | | | | | | | | | | |
| OTC | Apple | | AAPL | 45.63 | 43.19 | -2.44 | -5.34 | 11 | 0.48 | 1.11 | 48.06 | 24.63 |
| OTC | AST Research | | ASTA | 15.19 | 15.38 | 0.19 | 1.23 | - | 0.00 | 0.00 | 32.75 | 10.38 |
| NYS | Compaq | | CPQ | 43.38 | 37.88 | -5.50 | -12.68 | 12 | 0.00 | 0.00 | 44.38 | 29.50 |
| NYS | Digital Equipment | (H) | DEC | 36.75 | 36.13 | -0.63 | -1.70 | - | 0.00 | 0.00 | 38.75 | 18.25 |
| OTC | Dell | (H) | DELL | 46.88 | 45.25 | -1.63 | -3.47 | 19 | 0.00 | 0.00 | 47.75 | 21.00 |
| NYS | Hewlett-Packard | (H) | HWP | 106.38 | 115.88 | 9.50 | 8.93 | 17 | 1.20 | 1.04 | 116.00 | 71.88 |
| NYS | IBM | (H) | IBM | 77.25 | 75.50 | -1.75 | -2.27 | 15 | 1.00 | 1.32 | 78.00 | 51.38 |
| NYS | Silicon Graphics | (H) | SGI | 32.75 | 35.25 | 2.50 | 7.63 | 31 | 0.00 | 0.00 | 35.38 | 18.75 |
| OTC | Sun Microsystems | | SUNW | 34.63 | 34.13 | -0.50 | -1.44 | 13 | 0.00 | 0.00 | 37.63 | 18.25 |
| NYS | Xerox | | XRX | 104.13 | 109.00 | 4.88 | 4.68 | 16 | 3.00 | 2.75 | 112.75 | 90.63 |
| NYS | Tandy | | TAN | 50.25 | 46.00 | -4.25 | -8.46 | 18 | 0.72 | 1.57 | 52.38 | 30.75 |
| | CPU'S | | | | | | | | | | | |
| NYS | Advanced Micro Devices | (H) | AMD | 32.13 | 31.13 | -1.00 | -3.11 | 10 | 0.00 | 0.00 | 32.25 | 21.00 |
| OTC | Intel | (H) | INTC | 69.38 | 79.88 | 10.50 | 15.14 | 15 | 0.24 | 0.30 | 80.75 | 56.00 |
| NYS | LSI Logic | (H) | LSI | 43.25 | 52.38 | 9.13 | 21.10 | 27 | 0.00 | 0.00 | 52.88 | 16.75 |
| NYS | Motorola | (H) | MOT | 62.50 | 64.25 | 1.75 | 2.80 | 24 | 0.40 | 0.62 | 64.75 | 42.13 |
| | COMMUNICATIONS | | | | | | | | | | | |
| NYS | AT&T | | T | 49.00 | 51.38 | 2.38 | 4.85 | 16 | 1.32 | 2.57 | 57.13 | 47.25 |
| NYS | BellSouth Corp. | | BLS | 54.88 | 58.50 | 3.63 | 6.61 | 13 | 2.76 | 4.72 | 63.50 | 50.50 |
| OTC | MCI | | MCIC | 18.94 | 19.75 | 0.81 | 4.29 | 15 | 0.10 | 0.51 | 27.75 | 17.25 |
| NYS | Northern Telecom | | NT | 34.00 | 35.00 | 1.00 | 2.94 | 22 | 0.36 | 1.03 | 37.75 | 26.00 |
| NYS | Pacific Telesis | | PAC | 29.25 | 30.13 | 0.88 | 2.99 | 11 | 2.18 | 7.24 | 33.38 | 28.00 |

KEY: NYS = NEW YORK ASE = AMERICAN OTC = OVER THE COUNTER
(H) = NEW HIGH REACHED IN PERIOD (L) = NEW LOW REACHED IN PERIOD

**MARKET DIARY:**

| | |
|---|---|
| ADVANCES | 18 |
| DECLINES | 12 |
| UNCHANGED | 0 |
| NEW HIGHS | 12 |
| NEW LOWS | 0 |

**MOST ACTIVE ISSUES:**

| | | | |
|---|---|---|---|
| LARGEST DOLLAR GAINER | Intel | $ | 10.50 |
| LARGEST DOLLAR LOSER | Compaq | $ | -5.50 |
| LARGEST PERCENTAGE GAINER | LSI Logic | | 21.10 % |
| LARGEST PERCENTAGE LOSER | Software Publishing | | -15.00 % |

| | CLOSE 01/18/95 | CLOSE 02/16/95 | NET CHANGE IN PERIOD | PERCENT CHANGE IN PERIOD |
|---|---|---|---|---|
| MICROTIMES STOCK INDEX | 5832.57 | 5961.54 | 128.97 | 2.21 |
| DOW JONES INDUSTRIAL AVERAGE | 3928.98 | 3987 52 | 58.54 | 1.49 |
| STANDARD & POOR'S 500 INDEX | 469.72 | 485.22 | 15.50 | 3.30 |
| N.Y.S.E. COMPOSITE | 255.97 | 263.27 | 7.30 | 2.85 |
| NASDAQ COMPOSITE | 772.38 | 793.3[1] | 20.93 | 2.71 |

CLOSING QUOTES FOR GRAPH:

| DATE | MICRO TIMES | DOW JONES |
|---|---|---|
| 06/24/94 | 4238.94 | 3636.94 |
| 07/22/94 | 4577.29 | 3735.04 |
| 08/19/94 | 5070.19 | 3755.11 |
| 09/16/94 | 5323.66 | 3933.35 |
| 10/27/94 | 5478 47 | 3875.15 |
| 12/16/94 | 5370.37 | 3807.19 |
| 01/18/95 | 5832.57 | 3928.98 |
| 02/16/95 | 5961.54 | 3987.52 |

Copyright Nordby International Inc., Boulder, Colorado

This information is based on sources believed to be reliable, and while extensive efforts are made to assure its accuracy, no guarantees can be made. Nordby International assumes no liability for any inaccuracies. For information on Nordby's customized financial research services, call 1-800-926-7404.

## MicroTimes Index Continues To Grow In 1995

After a stellar increase of 8.61% in January, the MicroTimes Stock Index advanced another 2.21%, closing at 5961.54, up 128.97 points. Within the index, there were 18 advances and 12 declines. New highs totaled 12, compared to 11 last month, while new lows posted a fat 0.

In comparison, the Dow Jones Industrial Average set a new all-time high, closing at 3987.52, up 58.54 points, or 1.49%, from the previous month. On Wednesday, February 15, the inter-day high was 3997.95, just 2.05 points from the 4000 mark.

Turning to stocks in the MicroTimes Stock Index: Intel's stock continued to enjoy superior growth as expectations became increasingly positive. The company's share price climbed $10.50 to close at $79.88, up 15.14%. Based on better-than-expected gross margins and increasing demand for the Pentium and 486 microprocessors,earnings estimates have been raised by S.G. Warburg & Co. from $7.00 to $7.30 a share. Prudential's Mark Edelstone also lifted earnings expectations to $7.05 a share from $6.50, expecting more microprocessors to be sold as components rather than as motherboards.

LSI Logic, rated by Merrill Lynch & Co. as an intermediate and long-term "above average" stock, emerged as last month's largest percentage gainer, vaulting 21.10% to close at $52.38, up $9.13 a hare. LSI shelved privatization plans for its Canada unit based on differences of opinion regarding the value of LSI Canada shares. LSI, which already owns 55% of the Canada unit, offered to acquire the remaining 11 million shares at $3.30 each.

Compaq Computer Corp. performed poorly last month despite the positive direction the company has been traveling over the past year. For the month, Compaq stock unloaded $5.50 a share, closing at $37.88, down 12.68%. Reported net income for 1994 was a healthy $243 million, or 90 cents per share, compared to $151 million a year ago, or 58 cents a share. However, those numbers were below Wall Street's expectations of 94 cents a share, and the company's earnings are anticipated to be below expectations again for the first quarter of 1995.

Software Publishing suffered a reduction in price this past month, closing at $4.25, down 75 cents a share. The software maker's revenues for the first quarter of 1995 reported a 45% downswing from $22.7 million last year to $12.4 million. The revenue dip has been attributed to the diminishing business of DOS.

The Robert Austin
Computer Show & Sale

Browse through aisle after aisle of Computer Bargains

UPCOMING SHOWS

Anaheim Stadium
March 18, 1995
2000 State College Blvd,
Anaheim - Admission $4

Anaheim Stadium
April 15, 1995
2000 State College Blvd,
Anaheim - Admission $4

Anaheim Stadium
May 6, 1995
2000 State College Blvd,
Anaheim - Admission $4

Anaheim Stadium
May 27, 1995
2000 State College Blvd,
Anaheim - Admission $4

Super Savings on:

- Latest PC Systems
- Business Software
- Game/Family Software
- Multimedia Upgrades
- CD ROM Software
- Memory Upgrades
- Super VGA Monitors
- Accessories/Supplies
- Latest Shareware
- Hard Drives & More!

Thousands of Products Available for Immediate Purchase at Wholesale Prices

All shows open from 10am to 4pm
Kids 12 & under are always FREE!



on a local network. Putting a properly configured "firewall" system between that network and the outside world allows the computers on the local network to trust each other's addresses while keeping out intruders who pretend to be trusted. The systems being discussed in the recent news articles were not using properly configured firewalls.

A firewall system watches all the communications coming into and going out of a network and blocks messages that might cause a security problem. In the case of IP spoofing, the firewall can block all incoming messages that have addresses that the firewall knows only exist on the secure network, not out on the Internet at large. Firewalls capable of this kind of security have been around for years and are widely advertised; anyone who is not using one but is still relying on possibly fake addresses is at risk of being broken into.

**If you aren't very clear about**

Like any security system, a firewall has to be set up properly in order to work. Locking the front door to your house will stop some people, but if you leave the side door open, you are vulnerable to burglars who are only slightly more persistent. Similarly, if you insist on allowing access to your computers based on possibly fake addresses, you have to make sure your firewall is rejecting messages from the outside with those supposed addresses; otherwise, you are just as vulnerable as you were before.

**what kind of security you have in place,**

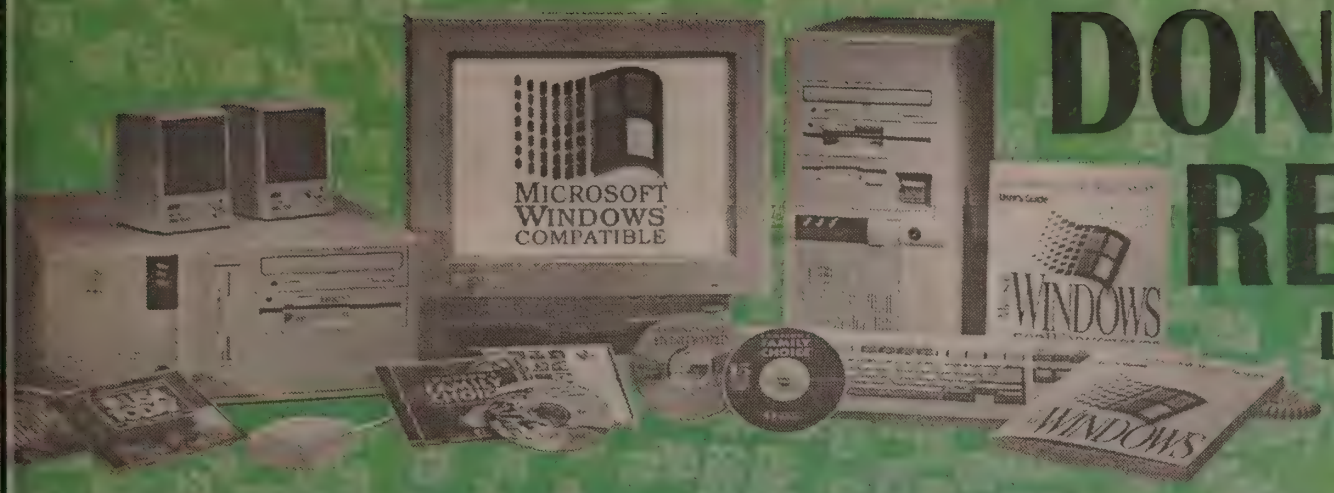
In fact, installing a firewall to prevent IP spoofing and other attacks can be dangerous if you aren't careful about its configuration, because it can give you a false sense of security. This is similar to the people affected by the recent floods here in California who had paid for "flood insurance" and later found out that it only covers damage to the house but not damage to the house's contents. If you aren't very clear about what kind of security you have in place, false security can be worse than no security.

All this is not to say that the Internet is a secure place: it isn't. Indeed, hackers discover new methods for breaking into sites on a regular basis. However, sites that pay much attention to security are usually not at great risk as long as they keep up with current technology and plug holes when they get reported. Internet sites that do not allow access based on supposed addresses and sites with firewalls are not affected by this "new" type of attack.

**false security can be worse than no security.**

Internet sites that don't pay much attention to security, and there are tens of thousands of them, are clearly at risk of getting broken into. If you stay in a hotel with a large sign that says "We never lock our doors," you would not be surprised to find your room burglarized. Even if the hotel has a sign that says "We pay attention to security" and you see that the locks on the front doors don't work, you would still expect the same thing. Keeping things locked up on computers that are on the Internet is not difficult.

When someone breaks into an Internet-connected computer, the press should look at the event not as proof that the Internet is inherently unsafe, but as a reminder that there are people out there who like to break into things, possibly for profit. Sites with good, up-to-date security policies will survive just fine on the Internet.■




# DON'T PAY RETAIL!!

## LIFETIME LABOR WARRANTY!!!

### P5-60MHz PENTIUM
**$1,499** intel inside

- Pentium 586 Intel CPU
- 256K Write-Back Cache
- 8MB Ram Exp. to 128MB
- 540MB Hard Disk
- PCI 1MB VGA Card
- PCI Controller
- Medium Tower Case
- 1.44 MB FDD TEAC
- CPU Cooling Fan
- SVGA 15" Monitor (NI .28MM) by Impression or CTX
- Mouse
- 101 Enhanced Keyboard

### P5-66MHz PENTIUM
**$1,529** intel inside

### P5-90MHz PENTIUM
**$1,879** intel inside

### SPECIAL

**SOUNDBLASTER CD ROM Package**
Amplified Speakers
12 CD Titles including Grolier Encyclopedia
16 Bit Soundcard
**$239**

**DAC QUAD SPEED CD ROM**
**$299**

**TOSHIBA QUAD SPEED**
SoundBlaster 16 SCSI
**$399**

Best Buy!

### NOTEBOOKS

**Novacomm**
**$949**
4MB Ram
120MB Hard Drive
9.5" Backlit
486/66MHz
200MB
Hard Drive
**$999**

### HARD DRIVE

**560MB IDE**
**$189**
3.5" x 1" HT
12MSec Access
256K Buffer

**486DX2-66MHz**
**486DX-33MHz**
**$979/$899**

- 256K Write-Back Cache
- CPU Cooling Fan
- 4MB RAM
- 420MB Harddisk (12MS)
- Mini Tower Case
- 1.44MB Floppy Drive
- VLB 32 Bit Super IDE & I/O
- VLB 32 Bit 1M Video
- SVGA 14" Monitor (.28MM NI)
- 101 Enhanced Click Keyboard
- 3 Button Hi-Re Mouse

intel inside

Best Buy!

### MULTI-MEDIA SYSTEM

M-486DX2/66MHz.....$1,499
M-486DX/33MHz.....$1,429

- Quad Speed CD ROM
- 16 Bit Sound Card
- Amplified Speaker
- CD Titles
- 256K Write-Back Cache CPU Cooling Fan
- 8MB Ram & Up To 128MB
- 540MB Harddisk (12MS)
- Mini Tower Case
- 1.44MB Floppy Drive VLB Super IDE & I/O
- VLB 1M Video
- SVGA 15" Monitor (.28MM NI)
- 101 Enhanced Click Keyboard
- 3 Button Hi-Re Mouse

intel inside

### PRINTERS

| | |
|---|---|
| HP 540 INKJET | $279 |
| 560C | $479 |
| Epson 5000+ | $239 |
| Okidata 400e | $425* |

### ACCESSORIES

| | |
|---|---|
| Sony CD-ROM Double Speed | $119 |
| 25-Watt Amplified Speakers | $32 |
| 14400 Baud Fax Modem | $59 |
| 420MB (Conner) Backup Drive | $179 |
| 16 Bit Sound Card w/12 CD Titles | $99 |
| Logitech Mouse | $29 |
| Microsoft Mouse | $29 |

* Aft. Mfg. Rebate $75

### HARD DISKS

| | |
|---|---|
| 420MB IDE | $169 |
| 540MB IDE | $199 |
| 1GB IDE | $399 |

### MONITORS

| | |
|---|---|
| Mono VGA 14" | $99 |
| SVGA 14" (0.39mm) | $189 |
| SVGA 14" (0.28mm) | $209 |
| SVGA 14" (0.28mm NI) | $219 |
| SVGA 15" (0.28mm NI) | $319 |
| SVGA 17" (0.28mm NI) (1280x1024) | $629 |

### CPU

| | |
|---|---|
| Pentium P5/90MHz | $595 |
| Pentium P5/60MHz | $335 |
| DX2-66MHz Intel | $185 |
| DX2-80MHz AMD | $189 |
| DX4-100MHz AMD | $239 |
| DX4-100MHz Intel | $299 |

AMD Please CALL for BEST PRICE

HEWLETT PACKARD
NEC
TOSHIBA
ViewSonic
CTX
...AND MORE!

**Financing Available**
**Corporate Accounts Welcome**
MON-FRI 10-7, SAT 10-6

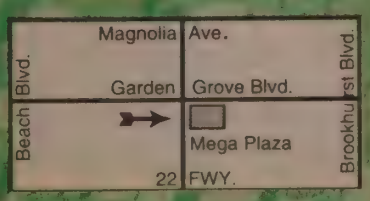
*Computek is not responsible for any typographical errors. * *Price Based On Cash Discount. Prices subject to change w/out notice.

VISA DISCOVER AMERICAN EXPRESS

# CompuTek

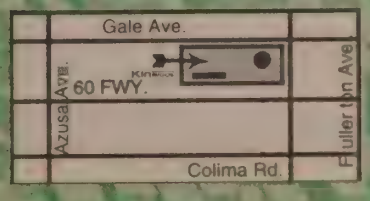
WE SERVICE ALL COMPUTERS

**GARDEN GROVE**
9042 Garden Grove Blvd. #100
Garden Grove, CA 92644
TEL (714) 741-9494
FAX (714) 741-9498




**SOUTH BAY**
15900 Crenshaw Blvd. #F
Gardena, CA 90249
TEL (310) 380-6677
FAX (310) 380-6678

**CITY OF INDUSTRY**
18230 Gale Ave.
City of Industry, CA 91748
TEL (818) 965-7477
FAX (818) 965-7077



**REALIZABLE FANTASIES** • BY JIM WARREN

# Rutting The Nation's Information Roadways

## Government—The Biggest Obstacle To Secure Online Commerce And Data Exchange

**This concerns** a *much*-needed, invaluable, *realizable* "fantasy" that we *don't* have—*only* because of the arrogance of myopic, self-serving government officials.

### A Clear And Present Danger

Let's say your phone conversations *might* be equally divided between (a) exciting and erotic intimate conversations; (b) sensitive financial information and access-numbers; (c) invaluable business, corporate, and industrial secrets; and (d) crucial political strategy discussions.

Would industrial spies, wire-fraud thieves, domestic and foreign surveillance experts, and nosey phone phreaques have incentive to crack the public phone system and eavesdrop? *You betcha!*

Or—perhaps all of this most-sensitive, most-valuable, most-exciting content *might* be in email messages, or digital files on your computer, that—of course!—is connected to the global Internet. Would crackers be likely to target you, and use all possible resources to crack your systems and access that material? *Sure!*

For instance, that's exactly what happened, around last December, with highly sensitive files about computer-network security mechanisms and cellular-system protection plans, stored in the computer files of international security expert Tsutomu Shimomura—on his networked computers at the San Diego Supercomputer Center and at his home. The systems were cracked, and many megabytes of his stolen files have now appeared at various open sites around the global nets.

Such dangers are well-proven, continuous, ongoing, real-world threats—personal, financial, corporate, and political. There are unending, high-profile horror stories about vile computer crackers and evil phone phreaques, widely publicized with the help of law-enforcement officials, by unquestioning reporters and newscasters—especially during sweeps weeks.

Hundreds of millions, perhaps billions of dollars' worth of information, software, and services have been and are being stolen by such spies and computer crackers.

Mischievous crackers enter and deposit flamboyant evidence that they were prowling through the most sensitive of personal, financial, business, government, and military files. Malicious crackers ferret out the most crucial files and trash them, or crash entire systems in the most damaging ways possible. And malevolent crackers quietly leave no trace, but instead, copy and steal as much as they can, for as long as they can, of the most valuable files they can identify, use, or sell.

And additional billions of dollars, and unending time and talent, are spent trying to patch-quilt the insecure global Internet—with its infinitely valuable openness—so that in-the-clear communications and plain-text files can somehow remain secure, among its three-million-or-so host computers around the world.

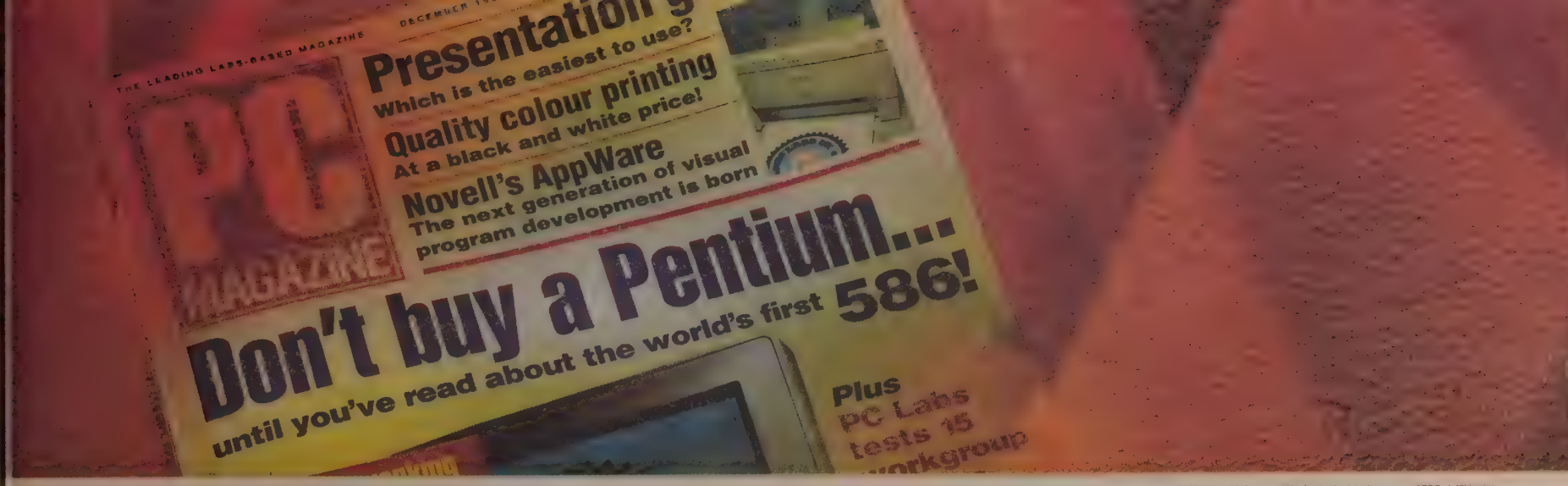
### Simple Solution Is Available

Now, let's add one more characteristic to your telephone conversations: What if everyone knew that all of your conversations were conducted entirely in an exotic language, known only to you and those with whom you converse. Would those same spies and crackers still invest time and effort—and risk prosecution and imprisonment—to crack your phone system, so they could listen to unintelligible gibberish?

Not very likely.

Or, what would happen to your computerized secrets—and Shimomura's files—if it was customary and standardized for every computer system and every data-communications link to routinely, systematically, and automatically encrypt all files every time they were stored, and all messages every time they were initially created—

**Straightforward, economical security for US citizens, businesses, and financial transactions is not standardized, nor convenient to use *exclusively* because US spies and US officials blindly oppose its national standardization and prohibit its export—all because it will complicate their ability to conduct covert surveillance and wiretaps.**




PC Magazine (UK), December 1994. Reprinted with kind permission of Ziff-Davis UK Limited

# Demand NexGen's Nx586™ Processor. Superior Performance. Unbeatable Price.

Now, you don't have to settle for a Pentium™ processor-based PC. Because there's a tough new kid on the block that delivers superior power and performance… for a *lot* less money.

It's the NexGen Nx586 processor. Manufactured by IBM Microelectronics.™ With patented RISC86™ microarchitecture that outperforms the Pentium processor, megahertz for megahertz. It's fully compatible with your DOS and Windows™ applications. And it's absolutely available right now.

So just call one of the PC suppliers listed below and ask for it by name. The Nx586 processor by NexGen. Don't buy a PC without it.

**NexGen Chip Challenges Pentium Performance**

*PC WORLD, November 1994*

| System | CPU | RAM (MB) | Application test times (in minutes:seconds) |
|---|---|---|---|
| Nx586(VL) System | Nx586-P90 | 16 | 1:06 1:15 1:11 |
| Pentium System[1] | Pentium-90 | 16 | 1:11 1:07 1:07 1:24 1:21 |

Shorter times are better.

0 1 2 3 4 5 6 7 8 9

[1] Average score of six Pentium-90 systems.

Tests run on preproduction unit.
PC World Test Center application benchmarks.

Word 2.0 for Windows · Excel 4.0 · Paradox 1.0 for Windows · Freelance 1.0 for Windows · WordPerfect 6.0 for DOS · 1-2-3 release 3.4 · Paradox 3.5

## Absolutely Available Right Now. Don't Buy a PC Without It!

Nx586 processor-based PCs are available from the following PC suppliers. Call the PC supplier of your choice and ask for NexGen's Nx586 processor by name.

**A2 Industries**
La Jolla, CA
619-452-5540

**Aberdeen**
Montebello, CA
800-952-6868

**ACP Superstores**
Santa Ana, CA
714-558-8813

**Add Tech Computer Inc.**
Somerset, NJ
908-805-0900

**Adisys Corporation**
Santa Clara, CA
800-423-4797

**AIS Computers**
Tucson, AZ
602-321-4640

**Alaris**
Fremont, CA
800-317-2348

**Allied Manufacturing Group**
Lodi, NJ
201-778-0707

**Alpine Computer Center**
Rockford, IL
815-229-0200

**ASA Computers, Inc.**
Santa Clara, CA
408-496-6953

**Bellio's Inc.**
Albuquerque, NM
505-883-7511

**Blackship Computer**
San Jose, CA
800-531-7447

**City Computers**
Rockville, MD
301-762-6880

**Compu-Tek**
Richardson, TX
800-994-0221

**Computer Components**
Middleton, WI
608-831-1165

**Computer Discount Mart**
Greenwood, IN
317-889-7220

**Computer Parts Plus**
San Marcos, CA
619-741-1700

**Computer Resources**
Englewood, CO
800-662-0034

**Computer Zone**
Beaverton, OR
503-626-3511

**Cybermaster**
Anaheim, CA
714-777-9095

**Data Storage Marketing**
Boulder, CO
800-543-6098

**DirectWave**
Ontario, CA
909-460-2595

**DFI**
East Brunswick, NJ
908-390-2815

**Duracom Computer**
Irving, TX
800-551-9000

**Fry's**
Sunnyvale, CA
408-733-1770
Fountain Valley, CA
714-378-4400

**FYI Computer Source**
Cincinnati, OH
513-753-1831

**Gateway USA, Inc.**
Westminster, CO
303-438-5500

**Globe Computers**
Scottsdale, AZ
800-467-0013

**ICS Computer Systems Corp.**
Richardson, TX
800-852-0614

**Lucky Computers**
Richardson, TX
214-437-3251

**Luiski International**
Melville, NY
516-454-8220

**M.E.C.**
Norcross, GA
404-447-1726

**Mandi Corporation**
Rancho Cordova, CA
916-858-1377

**Maximus**
Monrovia, CA
800-394-6299

**Megabyte International**
Norcross, GA
404-449-8630

**Micro Simplex**
Mesa, AZ
800-477-6144

**National Micro Computers**
Salt Lake City, UT
800-424-2983

**NCA Computer Products**
Sunnyvale, CA
800-961-1200

**Net Computers International**
Dallas, TX
214-386-9310

**Nexel Systems**
Princeton, NJ
609-371-0003

**Nictrix Corporation**
Leonia, NJ
201-947-2220

**Omni-Tech**
Houston, TX
713-784-9191

**Orientec Corp of America**
El Monte, CA
818-442-1818

**Pintos Pocket**
Seattle, WA
206-575-0939

**PC Concepts**
Dallas, TX
214-328-2888

**PC Express, Inc.**
Richfield, MN
800-937-1100

**PC Performance Centers**
Englewood, CO
303-771-8030

**Regnis, Inc.**
Tampa, FL
813-623-3302

**S.L.I. Radio Shack**
Truth or Consequences, NM
505-894-3442

**Saturn Computers**
Reno, NV
702-825-8588

**Sourceror Systems**
Palm Desert, CA
619-779-1818

**Systems Design Computers**
San Diego, CA
619-537-3737

**TAP**
New Brunswick, NJ
908-247-6000

**Tangent Computers**
Burlingame, CA
800-800-5550

**The Missing Byte Computers**
Houston, TX
713-782-5557

**Top Data**
Sunnyvale, CA
800-888-3318

**US Micro Express, Inc.**
Bellevue, WA
800-874-5505

**US Microtech**
Milpitas, CA
408-433-5922

**Victoria Computers**
Quebec, Canada
1-800-VEC-3433

**West Hills LAN Systems**
Chatsworth, CA
800-367-5267

© 1995 NexGen, Inc. Nx586, RISC86, and NexGen are trademarks of NexGen, Inc. Pentium is a trademark of Intel Corporation. Intel is a registered trademark of Intel Corporation. IBM Microelectronics™ is a registered trademark of International Business Machines Corporation. All products mentioned herein are trademarks of their respective companies. If you'd like to find out about reselling NexGen products, please call 1-800-6NEXGEN.

NexGen

Fantasies *continued...*

end-to-end scrambling?

Would crackers and spies try to crack the systems?

They would if the files *might* be valuable and the encryption standard was relatively weak. Like the elderly 56-bit-key DES, which was publicly proven to be crackable months before the federal government nonetheless adopted it as a standard. Or the newer, still-crackable, too-wimpy RC-4 crypto that is about the only public-key system the feds will permit to be exported—thus the only one being included in some software products produced for a global marketplace.

But what's *needed* is a nationally adopted, standardized, *really* secure, convenient-to-use—i.e., public-key—encryption system built into all file systems and datacomm software, using the techniques that have been known and published, worldwide, for more than a decade.

**No danger is too great nor too costly for this nation's citizens, financial transactions, and businesses—when balanced against government's desire to conveniently snoop and peep.**

And, if it's to be used in a nation that participates in world affairs and communications, then, obviously, it must also be exportable—at the *least*, for use by US citizens and corporations wishing to maintain thus-standardized security of their files and communications beyond the nation's borders.

If all files and communications were thus *routinely* and *systematically* protected with *maximum*-strength public-key crypto, would industrial and political spies and curious crackers be eager to gain access to your files and communications that would remain undecipherable gibberish?

Nope!—you'd finally be safe.

All of us *could* have such standardized protection included in our computer file systems, used throughout our global data communications and digitized voice communications.

Such technology is known and published throughout the world. Products and freeware that provide it are available around the globe. Entrepreneurs in former Eastern Bloc countries have implemented it and legally offer it for sale worldwide—while US software publishers are prohibited from so doing.


**SOFTWARE ELECTRONICS**
**1-800-634-6388** (Orders Only Please)
All software on this page are priced for *Academic discount.
*To purchase Academic products, you must fax or mail a student or faculty ID from any institution. Academic products are functionally identical to the regular products, the only difference is the price!

**Borland C++ Version 4.5**
NEW!
Fast C/C++ compiler for DOS, 16 & 32-bit Windows. New! AppExpert & Object Components Framework with OLE 2.0. New! ObjectWindows Library 2.5. Optimize 32-bit compiler for DOS & Windows Applications & Examples.
CD..Item# 6035 $129*
Disk 3.5".. Item# 6036 $159*

$89*
Visual Basic Standard v 3.0
(3.5" Disk) Item# 0070

**Microsoft Visual C++**
*Write C++ programs for Windows/NT visually.*
Win Std.....$89*
(3.5" Disk) Item# 6049
NT v2.0.....(CD-ROM) Item# 6047 $135*

**Microsoft Office Professional 4.3 for Windows**
Windows..Item# 9098 $199*
MAC v.4.2.....Item# 3641 $199*
(3.5" Disk Only)
*Microsoft Office includes: MS Word (Wordprocessor), MS Excel (Spreadsheet), MS Access (Database), MS Power Point (Presentation) & MS Mail (Network E-Mail).*

$89*
Microsoft Publisher
Publisher for Windows 2.0
(3.5" Disk) Item# 3656

**Perfect Office Professional**
Integrated Office Suite with Wordprocessing, Spreadsheet, Database, Presentation Graphics, E-Mail, Scheduling, PIM, App. Builder & Document Publishing/Viewing, Paradox & Visual App. Builder.
Professional 3.0...$229*
(3.5" Disk) Item# 6039

**Lotus SmartSuite**
- 1-2-3
- AmiPro
- Approach
- Freelance
- Organizer

$199*
Lotus SmartSuite
Integrated Office Suite with Wordprocessing, Spreadsheet, Database, Presentation Graphics & more..... (3.5" Disk) Item# 3853

- MS Works for Windows 3.0 (3.5" Disk) .....Item# 3538 $79*
- Lotus 123 for Windows 5.0 (3.5" Disk) .....Item# 3721 $129*
- MS Macro Assem. 6.11 for Dos (3.5" Disk).....Item# 3439 $79*
- MS Powerpoint 4.0 for Win (3.5" Disk).....Item# 6030 $109*
- MS Access for Windows 2.0 (3.5" Disk).....Item# 9090 $129*
- MS Excel for Windows 5.0 (3.5" Disk).....Item# 2447 $129*
- MS Word for Windows 6.0 (3.5" Disk).....Item# 2429 $139*
- MS Project for Windows 4.0 (3.5" Disk).....Item# 6050 $149*

**MS Windows NT**
**Version 3.5 (CD-ROM)**
Work Station..Item# 2099 $145*
Server.....Item# 6034 $399*
Windows NT Server

*ThrustMaster High Quality Joystick Systems at a low price!*

$99
Item# 3604
F-16 FLCS
The F-16 FLCS is a versatile stick with virtually unlimited programmability. It features a grip molded after the F-16 Fighting Falcon, four 8 way hat switches, a dual stage trigger & three strategically placed buttons.

$99
Realistic rudder pedals for your flight sims. Its authentic design gives extra control. Item# 1595

**Pro Flight Control System**
The PFCS is a highly authentic joystick with gear driven potentiometers and an aluminum base. It utilizes the same grip as the FCS and features a unique spring design.
$99 Item# 2189

**Mark II Flight CONTROL SYSTEM**
$59
The FCS features a realistic grip (designed after the F-4 Phantom jet stick) and multiple functions. Works as a two-button stick in all joystick supported games. Item#3831

$25
Smart Game Card
- Dual Ports
- Speed Adjustable
- Works with Pentium

While Supplies Last!

**WCS Mark II**...Item# 2477 $99
A fully programmable throttle for your flight sims. The WCS features virtually unlimited functions, throttle control.

**Switch Between Your Favorite Joysticks**
- A/B Joystick Switch Box ..... Item# 3867 $49
- Cable DB15 M/M 6ft Item# 3868 $15

Add $10 per item for handling and UPS ground shipping direct to your door.
HOW TO ORDER - Please have the following information ready before ordering; Item#, shipping address, credit card number, expiration date & cardholder's address.

**1-800-634-6388**
Software Electronics 24hrs Orders Only Line

For Questions Call: 503-690-1946
VISA MasterCard DISCOVER
No surcharge on VISA/MC/Discover
Prices & Availability subject to change without notice Rev 021595A
Prices good through March 30th 1995

**SOFTWARE ELECTRONICS**
1235 NW 185TH AVE • ALOHA, OR 97006
For Information Call: 503-690-1946 FAX: 503-531-0442
M-F 9:30-6PM SAT 11-5PM

# BUY DIRECT AND SAVE

DataByte SYSTEMS

# DataByte Systems

The Complete Computer System Design and [illegible]

## PENTIUM-90

**SAME CONFIGURATION AS LISTED WITH;**

☑ ACTUAL INTEL SYSTEM BOARD AND INTEL PENTIUM-90 CPU, 256K AMI FLASH BIOS, ADVANCED OPTI CHIPSET, 72-PIN RAM EXP TO 128, ZIF SOCKET, 64-BIT MEMORY WITH BURST MODE, 16C552 SERIAL, BUILT IN INTEL PCI
☑ ENHANCED IDE SYSTEM CONT.
PCI SVGA CARD 1MB WITH DRIVERS

**ADD PRICE TO ADVERTISED $1599.00**

**$799.00**

## Nx586-P100

**SAME CONFIGURATION AS LISTED WITH;**

☑ NEXGEN Nx586-P100 SYSTEM BOARD AND CPUI, 256K CACHE, AMI BIOS, NxVL CHIPSET, POWERFUL RISC86 PROCESSOR.
SLOTS 2-VLB 5-ISA

**ADD PRICE TO ADVERTISED $1599.00**

**$699.00**

Windows NT SPECIALISTS

## DBS 486-80DX2

### QUAD.SPEED MULTIMEDIA SYSTEM
### 8-RAM / 540-HD / 15" MONITOR

AMD 486-80DX2 SYSTEM PROCESSOR, AMI BIOS, ADVANCED OPTI CHIPSET, ADVANCED 3.3 VOLT CPU FOR COOLING
8MB RAM, FAST 70NS ACCESS WITH 72-PIN EXPANDABILITY TO 128MB
540MB ENHANCED IDE HARD DRIVE, SUB 10MS ACCESS
1.44 FLOPPY DRIVE
VESA -LB ENHANCED IDE SYSTEM CONTROLLER WITH 2-SERIAL, 1-PARALLEL, 1-GAME, UP TO 4HD SUPPORT
KEYTRONICS 101 ENHANCED TACTILE TOUCH KEYBOARD
VESA-LB SVGA CARD 1MB WITH FULL WINDOWS DRIVERS SET
15" FULL SCREEN SVGA MONITOR .28DP CLARITY, N.I. FLICKER FREE DISPLAY, LOW RADIATION, GREEN-PC
MINI TOWER CASE, UL CERT. 250WATT PS FOR EXPANSION, HIGH FLOW FAN, BENT METAL CONSTRUCTION
3-BUTTON MOUSE WITH MOUSE PAD
TEAC QUAD SPEED COMPLETE MULTIMEDIA KIT, ( PERFECT FOR HIGH END MULTIMEDIA AND VIDEO )
TEAC QUAD SPEED INTERNAL CD-ROM DRIVE, 195MS ACCESS, 600KB TRANSFER
JAZZ 16 BIT SOUND CARD
LABTECH SPEAKERS
GROLIERS CD-ENCY. AND MUCH MORE...

**INCLUDES:**
**3-YEAR PARTS WARRANTY**
**LIFETIME LABOR WARRANTY**
**LIFETIME 800 TECH SUPPORT**

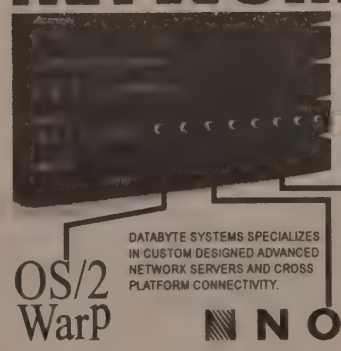
**$1599.00** Limited Time Offer

**Call for custom configurations...**

## 3-Year Parts
## Lifetime Labor Warranty

QUALITY SERVICE AND SUPPORT GUARANTEED

## NETWORKING FREE




NETWORK CONSULTING CALL FOR DETAILS.

DATABYTE SYSTEMS SPECIALIZES IN CUSTOM DESIGNED ADVANCED NETWORK SERVERS AND CROSS PLATFORM CONNECTIVITY.

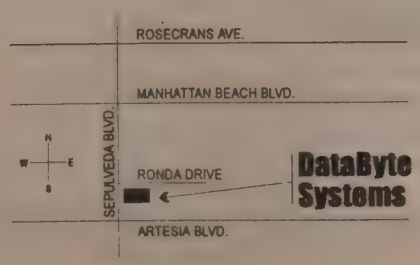
## CUSTOM SYSTEM DESIGN

**We'll design it, Build it, Test it and Warranty it. FREE!!!**

DATABYTE SYSTEMS IS A HIGH VOLUME DIRECT DISTRIBUTOR FOR OVER 20,000 COMPUTER PARTS AND COMPONENTS. COMBINE THIS WITH OUR YEARS OF EXPERIENCE AND YOU HAVE A ONE STOP SOLUTION TO ALL OF YOUR COMPUTER NEEDS.

## CORPORATE ACCOUNTS & RESELLERS WELCOME.

**Volume discounts, Net Terms, Professional support...**




DataByte Systems 120 South Sepulveda Blvd, Manhattan Beach, CA 90266

**Toll Free 1-800-281-1911 Fax 310-798-6377**

# 310-372-5987

Fantasies *continued...*

### FBI, NSA Aid And Encourage Criminals

Straightforward, economical security for US citizens, businesses, and financial transactions is not standardized, nor convenient to use *exclusively* because US spies (such as CIA turncoat Aldridge Ames) and US officials blindly oppose its national standardization and prohibit its export—all because it will complicate their ability to conduct covert surveillance and wiretaps.

No danger is too great nor too costly for this nation's citizens, financial transactions, and businesses—when balanced against government's desire to conveniently snoop and peep.

[This perspective contributed by Menlo Park's John Nagle.]

If all files and communications were *routinely* and *systematically* protected with *maximum*-strength public-key crypto, would industrial and political spies and curious crackers be eager to gain access to your files and communications that would remain undecipherable gibberish?

### The Watergate Memorial

Consider this a footnote to the half-a-billion tax dollars that Congress authorized last year for the new, undetectable, listen-from-anywhere, keyboard-controlled Federal Wiretap System—for use by local, state, and federal clerks, agents, and near-omnipotent bureaucrats (e.g., J. Edgar Hoover's replacements) who report to incumbent politicians. And it has *no* independent oversight to deter abuses, although it's technologically trivial to implement.

Appropriately, HR 4922, the legislation that forced US phone companies to implement the Federal Wiretap System, was introduced on the twentieth anniversary—to the day!—of Richard Nixon's resignation, after his staff failed in their efforts to bug his political opponents' national headquarters in Washington's Watergate office complex. ■

Copyright © 1995 by Jim Warren; email/*Jwarren@well.com*; 345 Swett Rd., Woodside, CA 94062. Permission herewith granted to copy-in-full for any nonprofit use.

**GENESIS COMPUTER SYSTEMS, INC.**
4095 E. LaPalma Ave. #J, Anaheim, CA 92807
(714) 632-3648 FAX: (714) 632-8045
OPEN Mon.—Fri. 9:00A.M.—6:00P.M. Sat. 10:00A.M.—5:00P.M.

**486 66/80/100 MHz SYSTEM**

486 VLB GREEN Mother board w/256k Cache/Opti Chipset/ZIF Socket/AMI BIOS
4 MB RAM 70 ns (brand name)
420MB IDE Hard Drive (brand name)
Shamrock 14" NI SVGA Monitor 0.28 dp
1.44 FDD (Teac/Mitsumi)
TRIDENT 9440 1MB SVGA Card w/1MB
Vision VLB Enhanced Controller Card w/I.O.
Minitower Case with Digital display
101 Keyboard & Mouse
CPU Heatsink + cooling fan

with Intel DX2-66 CPU ... $989
AMD DX2-66 CPU ... $949
AMD DX2-80 CPU ... $969
AMD DX4-100 CPU .. $1049
Intel DX4-100 CPU .. $1099

Note: For multimedia add prices from Multimedia section.

**Pentium 60/66/90 PCI SYSTEM**

Pentium 60/66/90 CPU w/ fan
PCI Motherboard
Opti Chipset, 256K Cache
8MB RAM, 70 ns (brand name)
540MB HDD (brand name)
Shamrock 15"SVGA
NI Monitor digital
Trident 1MB PCI SVGA Card
1.44 MB 3½"FDD (TEAC/NEC)
PCI IDE & 2S, 1P, 1G port
Midtower Case w/ Digital display
101 Keyboard & Mouse

$1475/1525/1890

intel inside

**$$$ SUPER DEALS $$$**

IBM 486SLC2-66 VLB
Complete System ..... $750*
486DLC-40 ISA
Complete System ..... $675*
*Comes w/CPU, Math Co, 2 MB RAM, 270 MB HD, and 14" SVGA .39 dp Monitor

**BRAND NAME MEMORY**

| | | | |
|---|---|---|---|
| 1 MB 30 pin | $37.00 | 8 MB 72 pin | $379.00 |
| 4 MB 30 pin | $130.00 | 8 MB 72 pin* | $275.00 |
| 4 MB 72 pin | $159.00 | 16 MB 72 pin | $495.00 |
| 4 MB 72 pin* | $149.00 | 16 MB 72 pin* | $419.00 |

*no parity

**PARTS & COMPONENTS**

MOTHERBOARDS
486DLC-40, 128k Cache w/CPU & Math Coprocessor ..... $119
IBM 486SLC2-66 VLB w/CPU & Math Coprocessor ..... $139
486DX2-66 VLB, 256k Cache, 30 pin SIMM slots w/Intel CPU ... $259
486DX2-66 VLB, 256k Cache, 30/72 pin SIMM slots w/Intel CPU .. $269
Pentium 60/66 OPTI PCI/VLB/ISA 256k Cache w/o CPU ..... $149
Pentium 90/100 OPTI PCI/VLB/ISA 256k Cache w/o CPU ..... $199
Pentium 90 Intel chipset PCI/VLB/ISA 256k Cache w/o CPU .... $289

HARD DRIVES
270 MB Conner ..... $146
420 MB Conner / Maxtor / Quantum ..... $169
540 MB Conner / Maxtor / Quantum ..... $189
850 MB Conner / Maxtor ..... $269
1.08 GB Western Digital EIDE Caviar 31000 ..... $395
1.2 GB Conner EIDE ..... $399
1.06 GB Conner FS/2 SCSI ..... $499
2.1 GB Conner FS/2 SCSI ..... $859

VIDEO CARDS
Trident 9440 VLB 1MB SVGA ..... $69
Cirrus Logic 5428 VLB SVGA ..... $73
Diamond Stealth 2MB VRAM PCI or VLB SVGA ..... $279
Diamond Stealth 2MB DRAM PCI or VLB ..... $179

MULTIMEDIA
Sound Blaster sound card, Sony CDROM (250 ms.), CD titles, 40 W speakers $249
16 bit sound card, Panasonic CDROM (320 ms.), CD titles, speakers .... $229

MONITORS
14" NI Shamrock ..... $205
15" NI Shamrock digital ..... $289
17" MAG (DX 17F) .26 dp digital ..... $589

MISCELLANEOUS
Mitsumi 1.2/1.44 FDD pair ..... $69
Conner 420 MB Tape Backup ..... $169
Smartlink 14.4 kbps Modem ..... $69
US Robotics 14.4 kbps Modem ..... $99

Systems w/ one yr. parts & labor waranty. Prices & availability subject to change w/o notice, Prices incl. cash disc. Not respnsible for typo All trade marks belong to respective companies. 72 hour burn-in before shipment

# Citicom Computer

## Pentium 90

INTEL Pentium 90 Processor
Intel Neptune Chipset Motherboard w/ 256K
PCI Local Bus
Medium Tower Case and Power Supply
8MB RAM (72PIN)
540MB Hard Disk Drive (11ms)
1.44 Floppy Disk Drive
Diamond Stealth64 PCI Video w/ 2MB
15" .28 Non-Int SVGA Monitor
On-Board PCI IDE Controller
2 Serial and 1 Parallel Ports
101 Enhanced Keyboard
Serial Mouse

**$1990**

## 486DX4-100

INTEL 486DX4-100 Processor
Vesa Local Bus Motherboard w/ 256K
Vesa Local Bus
Medium Tower Case and Power Supply
8MB RAM (72PIN)
540MB Hard Disk Drive (11ms)
1.44 Floppy Disk Drive
Diamond Stealth64 VLB Video w/ 2MB
15" .28 Non-Int SVGA Monitor
Vesa Local Bus IDE Controller
2 Serial and 1 Parallel Ports
101 Enhanced Keyboard
Serial Mouse

**$1490**

## 486DX4-75

INTEL 486DX4-75 Processor
Vesa Local Bus Motherboard w/ 256K
Vesa Local Bus
Mini Tower Case and Power Supply
4MB RAM (72PIN)
540MB Hard Disk Drive (11ms)
1.44 Floppy Disk Drive
VLB Winodws Accelerator w/ 1MB
14" .28 Non-Int SVGA Monitor
Vesa Local Bus IDE Controller
2 Serial and 1 Parallel Ports
101 Enhanced Keyboard
Serial Mouse

**$1090**

## 486DX2-66

INTEL 486DX2-66 Processor
Vesa Local Bus Motherboard w/ 256K
Vesa Local Bus
Mini Tower Case and Power Supply
4MB RAM (72PIN)
420MB Hard Disk Drive (11ms)
1.44 Floppy Disk Drive
VLB Windows Accelerator w/ 1MB
14" .28 Non-Int SVGA Monitor
Vesa Local Bus IDE Controller
2 Serial and 1 Parallel Ports
101 Enhanced Keyboard
Serial Mouse

**$980**

## *Multimedia Bundles*

| | |
|---|---|
| 16 Bit Stereo Sound Card<br>Double Speed CDROM | $ 179 |
| Sound Blaster 16 MCD<br>Sony / Panasonic 2X CDROM | 219 |
| Sound Blaster 16 MCD<br>Mitsumi 4X CDROM | 279 |
| Sound Blaster 16 SCSI<br>Toshiba 4X CDROM | 429 |

### *Microsoft Multimedia Bundle*

Works 3.0 Multimedia Edition
Encarta 1995 Encyclopedia
Dangerous Creatures
Golf Multimedia Edition
Windows Entertainment Pack
High Quality Stereo Speakers

*Add To Any Multimedia Kit for $99*

**Monday-Friday 10-7**
**Saturday 10-6**

## *Monitors*

| | |
|---|---|
| Shamrock 14" SVGA .28 | $ 219 |
| Shamrock 15" SVGA .28 | 319 |
| Shamrock 17" SVGA .26 | 575 |
| Optiquest 2000DC 15" .27 | 385 |
| Optiquest 4000DC 17: .26 | 695 |
| Optiquest 4500DC 17" .28 | 725 |
| MAG DX-15 .26 | 385 |
| MAG DX-17 .26 | 595 |
| Sony 15SF .25 | 419 |
| Sony 17SF-1 .25 | 875 |
| Sony 17SE .25 | 975 |

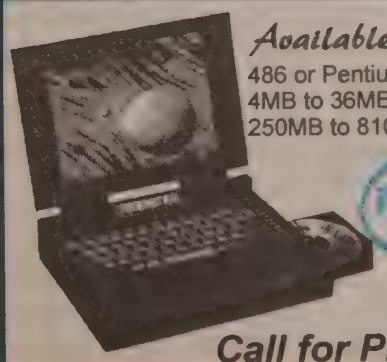
## *Video Adaptors*

| | |
|---|---|
| Trident 1MB VLB | $ 69 |
| Trident 2MB PCI | 139 |
| Mach64 2MB DRAM | 189 |
| Mach64 2MB VRAM | 279 |
| Mach64 4MB VRAM | 469 |
| Stealth 64 2MB DRAM | 189 |
| Stealth 64 2MB VRAM | 279 |
| Stealth 64 4MB VRAM | 479 |
| Viper SE 2MB VRAM | Call |
| Impression Plus 2MB VRAM | Call |
| Impression Plus 4MB VRAM | Call |

## *Hard Disk Drives*

| | |
|---|---|
| Samsung 420MB | $ 160 |
| Samsung 540MB | 190 |
| Conner 420MB | 195 |
| Conner 540MB | 220 |
| Maxtor 420MB | 195 |
| Maxtor 540MB | 230 |
| Maxtor 1.2 Gig | 435 |
| Western Digital 420MB | 190 |
| Western Digital 540MB | 230 |
| Western Digital 850MB | 310 |
| Western Digital 1.08 Gig | 395 |

## *Sager Notebooks*



*Available With:*
486 or Pentium CPU
4MB to 36MB RAM
250MB to 810MB HDD

**Call for Prices**

## *City of Industry*

18759 Colima Road
Tel: (818) 913-6555
Fax: (818) 913-5270

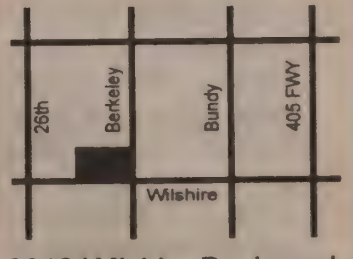
## *Los Angeles*

2520 W. 8th Street
Tel: (213) 388-4774
Fax: (213) 388-2741

## *Garden Grove*

13161 Brookhurst Street
Tel: (714) 537-3399
Fax: (714) 537-2521

## *West Los Angeles*




3019 Wilshire Boulevard
Tel: (310) 453-2726
Fax: (310) 453-6716

# CFP'95

The Fifth Conference on Computers, Freedom and Privacy
Sponsored by ACM SIGCOMM, SIGCAS, SIGSAC, and Stanford Law School

**March 28—31, 1995**

*San Francisco Airport Marriott Hotel*
*Burlingame, California*

**Questions About CFP'95?**

Email: *Info.CFP95@forsythe.stanford.edu*
*Fax:* **(415) 548-0840**
*Call:* **(415) 548-9673**

*Note: The program content and schedule is subject to change without notice.*

## We have reached

the crossroads of the Information Age.

No longer is the electronic frontier inhabited solely by a small band of technical pioneers sharing a common code of conduct. Computer and telecommunications technologies have become part of mainstream living, conversation, and politics. We have a much larger, more global, and more diverse population using these new technologies. And these technologies are being applied to a much broader set of problems touching the lives of a far greater proportion of the population. As a result, new freedom and privacy questions have arisen while many previous questions have become even more complex and significant.

These changes compel us to reexamine the definition of our rights and the processes by which those rights are being defined.

The broader use of computer and telecommunications technologies holds great promise for individuals and society. These technologies, applied on a larger and wider scale, can fundamentally transform our lives, bringing new meanings to our freedoms to speak, associate, be left alone, learn, and exercise political power.

At the same time larger and wider scale use of these technologies poses threats to the ideals of a just, free, and open society. Personal privacy is increasingly at risk from invasion by high-tech surveillance and eavesdropping. The expanding number of myriad databases containing personal information maintained in the public and private sectors expose private life to constant scrutiny. More than ever before, political, social, and economic fairness may hinge on ensuring equal access to these technologies, but how, at what cost, and who will pay?

The more frequent and far-reaching incidences of illegal activity based on computer and telecommunications technologies create new problems for legal and law enforcement officials, and challenge the very definitions of crime and civil liberties. But the more prevalent use of new technologies to combat these crimes can threaten the traditional barriers between the individual and the state.

Even such fundamental notions as speech, assembly, and property are being transformed, throwing into question the basic Constitutional protections that have guarded them. Similarly, information knows no borders; with today's global economy and rapidly growing networked communities functioning across international boundaries, ways must be found to reconcile competing political, social, and economic interests in the digital domain.

The Fifth Conference on Computers, Freedom and Privacy will assemble experts, advocates, and interested people from a broad spectrum of disciplines and backgrounds in a balanced public forum to explore and better understand the definition of our rights at this crossroads of the Information Age. Participants will include people from the fields of computer science, law, business, research, information, library science, health, public policy, government, law enforcement, public advocacy, and many others.

Registration is limited: CFP'95 registration will be limited to 550 attendees, so we advise you to register as early as possible.

## TUTORIALS

*Stanford Law School has been approved as a continuing legal education provider of Minimum Continuing Legal Education by the State Bar of California. Each indicated tutorial will qualify for Minimum Continuing Legal Education credit by the State Bar of California in the amount of three hours. Stanford Law School certifies that this activity conforms to the standards for approved education activities prescribed by the rules and regulations of the State Bar of California governing minimum continuing legal education.*

### Tuesday, March 28

9:00 am– Noon

#### The Law of Fundamental Rights for Non-Lawyers (MCLE Credit)

*-Mike Godwin, Staff Counsel, Electronic Frontier Foundation*

This tutorial presents an outline of the law for non-lawyers dealing with Constitutional issues that confront those concerned with freedom and privacy in the Information Age. Recent cases, legislative proposals, and government activities will be summarized.

#### Inside Washington: The New Congress and Secrets of Advocacy

*-Marc Rotenberg, Electronic Privacy Information Center*

*-David Banisar, Electronic Privacy Information Center*

*-Chris Casey, Office of Senator Edward M. Kennedy*

An inside look at key Congressional committees and the movers and shakers determining national communications and information policies. The tutorial will then explore some of the tricks for getting heard in Washington, including "Hardballs and Curve Balls: What Press Spin Is Not," "Digital Astroturf and Smoke-Filled Rooms: Advocating in Cyberspace," and "Would You Read Constituent Mail?"

#### National ID Card Initiatives

*-Mitch Ratcliffe, Editor-in-Chief,* Digital Media

Should every citizen carry a national ID

*continued on page 155*

# Syntax Manufacturing & Distribution Since 1986

## Intel Pentium PCI

- Intel 64Bit PCI bus-master and ISA slots
- 256K write-back cache
- *8MB DRAM, upgradable to 128MB*
- Mid-tower case w/250W power supply
- *540MB IDE HDD w/128K buffer*
- PCI Enhanced-IDE controller 2S/1P/1G
- 1.44MB FDD
- *15" KFC SVGA monitor, green, NI, digital*
- *Trident PCI SVGA controller w/1MB DRAM*
- Chicony 101 enhanced KB, Hi-Res mouse

## IBM 486 DLC-75 Blue Lightning VLB

- PATH 411 motherboard made by IBM
- Energy saving green system
- Math Co-Proc, 256K cache
- *4MB DRAM, upgradable to 64MB*
- Mini-tower case w/230W power supply
- *420MB IDE HDD w/64K buffer*
- VLB Enhanced IDE w/2S/1P/1G/16550
- 1.44MB FDD
- *14" KFC SVGA monitor, .39DP*
- *VLB SVGA controller w/1MB DRAM*
- Chicony 101 enhanced KB, Hi-Res mouse

## Intel 486DX VLB

- VESA LB motherboard w/256K write back cache
- Energy saving green system
- *4MB DRAM, upgradable to 64MB*
- Mini-tower case w/230W power supply
- *420MB IDE HDD w/64K buffer*
- VLB IDE controller w/2S/1P/1G
- 1.44MB FDD
- *14" KFC SVGA monitor, .39DP*
- *VLB SVGA controller w/1MB RAM*
- Chicony 101 enhanced KB, Hi-Res mouse

## 486SX WORKSTATION BLOWOUT !!

- *486DX/SX 25 / 33 / 66 motherboard*
- *ALL in one design*
- *0K cache, up to 128K cache*
- *Slim case w / power supply*
- *IDE I / O*
- *1.44MB FDD*
- *256K VGA controller, upgradable to 512K / 1MB*
- *No CPU, HDD, and Monitor*
- *ALL new systems, not refurbished*
- *WE WILL BUILT TO YOUR SPECIFICATION*

| | |
|---|---|
| i486DX4-100 | $1395.00 |
| Pentium-60 | $1445.00 |
| Pentium-90 | $1795.00 |

**$870.00**

| | |
|---|---|
| i486DX-33 | $880.00 |
| i486DX2-66 | $940.00 |
| i486DX4-100 | $1010.00 |

| | |
|---|---|
| QTY. | 5+.....$119.00 |
| QTY. | 20+.....$109.00 |
| QTY. | 50+..... CALL |

# WE WILL CONFIGURE SYSTEMS TO FIT YOUR NEEDS!

## Multimedia Packages

Panasonic 2X CD ROM, Mozart 16Bit sound card, 2 amplified speakers, Compton's Encyclopedia, US Atlas, World Atlas, Chessmaster 4000, Mavis Beacon, 50 games for Window
..... **$199.00**

Creative Labs Discovery CD16, 2X CD ROM, Soundblaster 16, 2 amplified speakers, 15 titles worth over $500.00!!
..... **$249.00**

3X CD ROM packages ..... Call
4X CD ROM packages ..... Call

## Fax Modems

Smart Link 96/24 S/R ..... **$30.00**
GVC 14.4/14.4 S/R w/Voice mail
.....**$70.00**

## We also carry

- NOVELL Netware.
- NOVELL Certified Network products by Katron.
- Motherboards by Goldstar & IBM.
- Hard drives & Floppy drives.
- Memory modules.
- Keyboards by Chicony & Focus.
- KFC Green Monitors

please call for pricing!!

intel inside

KFC

PATH 411

energy

Syntax

**818 810 4616**

Fax: 818 810 1676
17088 EAST GREEN DRIVE. CITY OF INDUSTRY, CA 91745

VISA

**Warranty: One year parts • lifetime labor • 3 years technical**

# Pay Less $ Lake Forest Computers & Get More

TEL:(714)837-4284 ! BBS:(714)837-4285 ! FAX:(714)837-4286

**24 Hours FREE Bulletin Board System, logon speed at 2400bps to 14400bps**

## Pentium PCI 75/90/100

### Power Workstation

New INTEL Pentium CPU w/Cooling Fan
Flash AMI BIOS, 256K Cache
1.44MB FD(Teac), Medium Tower Case
250W UL Green Power Supply
Maxi 101 Keyboard, HI-Res Mouse & Pad
8MB RAM at 70ns, Exp. 196MB
540MB IDE Hard Drive
PCI SVGA Graphics Card w/1MB
PCI Enhanced IDE Interface
Two high-speed Serial, one high-speed Parallel
15" FLAT, SVGA, NI,1280x1024, Green Monitor
1 Full Year Parts & Labor Warranty

| | |
|---|---|
| Pentium-75 | $ 1699 |
| Pentium-90 | $ 1999 |
| Pentium-100 | $ 2099 |

## 486 DX2/DX4 VLB

### Multi-Media PC

Pentium CPU Upgradable
486DX2/66 CPU(ZIF Socket)
256K Cache & Cooling Fan
4MB RAM(Exp. to 128MB)
1.44MB FD, Mini Tower Case
230W 'UL' Power Supply
102 Enhanced Keyboard
HI-res Mouse & Pad
540MB IDE Hard Drive
Double-Speed CD-ROM
16bit Sound Card, 2 Speakers
32bit VLB IDE/IO w/2S/1P/1G ports
32bit VLB Super VGA Card w/1MB
14" SVGA, NI, 1024x768, Green Monitor
1 Full Year Parts & Labor Warranty

| | |
|---|---|
| 486DX2/66 | $ 1299 |
| 486DX4/100 | $ 1399 |

## FREE CLASS

New Horizons
Computer Learning Center

External 2x CD-ROM
Parallel port Device
$ 129

## Multi-Media NoteBook

### Key Features

* 9.5" LCD panel(Mono and Color TFT)
* 10.3" LCD panel(Color dual scan STN LCD)
* 3&1/2", 1.44MB Floppy Drive
* 64 grey shades(Mono) & 256 Colors(Color)
* 1MB VESA Local Bus Video
* Simultaneous Display Features
* 85/86 keys keyboard and special hot keys
* Built-in Trackball mouse
* 1 Parallel port, 1 Serial port, Ext. VGA port
* External Keyboard / PS2 Mouse port
* Docking connector for Docking Station
* PCMCIA Type II/I Connector
* Audio Line in and Speaker out Connector
* 2.8 in Serial Flash Connector
* 5.8 LBS (Mono), 6.8 LBS (Color)
* Memory Support Board (64 - 4mb, Cache)

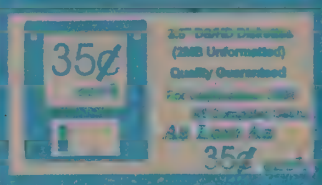
Mono Screen:
486SX/33, 4MB, 262MB HD $ 1325
Dual Scan Color Screen:
486SX/33, 4MB, 262MB HD $ 1795
Active Color Screen:
486SX/33, 4MB, 262MB HD $ 2585
Upgrade Your Unit

| | | | |
|---|---|---|---|
| * Up to 486DX2/66 CPU | +$100 | * Up to 340MB Hard Drive | +$100 |
| * Up to 486DX4/75 CPU | +$150 | * Up to 540MB Hard Drive | +$260 |
| * Up to 486DX4/100 CPU | +$200 | * 14400 Fax/Modem | +$145 |
| * Up to 8MB Memory | +$180 | * Networking Card | +$145 |
| * Up to 16MB Memory | +$100 | * Extra Battery | +$110 |

Financing Available
90 Days Interest Free Program

## Complimentary Image Scanning

**We will scan up to a PAGE with our COLOR Scanner**




We do service!
- PC Repair
- System Upgrade
- Memory Upgrade
- Monitor Repair
- Network Install
- CNEs Work for You
- Prices are Subject to Change Without Notice
- Prices reflect 3% Cash Discount

All Registered Trademarks are the property of their respective companies.

External IDE Hard Drive
Available NOW !

High-Performance
Microsoft Window NT
File Server 3.5
Networking
Specialist

Novell Certified NetWare Engineer

DISCOVER AMERICAN EXPRESS VISA MasterCard

## CD ROM Titles ON SALE

95 Microsoft ENCARTA $ 65 Only !

24552 EL TORO RD. #7A
LAKE FOREST, CA 92630
Business Hours:
M-F\10:30-6,SAT\10:30-4

**LAPTOPS** • ED KAHN

# DataPen Scanner

**RESOURCES:**
**Data Pen, $399**
I.R.I.S. America
1600 N.W. Boca
Raton Blvd., Ste. #20
Boca Raton, FL 33432
(407)395-7831

## Scanners

have long held out unrealized promise for me. All of the basic things a scanner let me do was alright, but I always wanted it to be able to do more. For instance, I would like to come home from the library with the results from my research already in my portable. But flatbed scanners are not generally portable enough and handheld scanners are too cumbersome for the work I want to do.

The new DataPen scanner is the device I have been waiting for. It looks like a highlighter and plugs into the parallel port of my computer. It easily fits in my briefcase and provides the flexibility to pick and choose the passages that I want to capture without entering the information either by hand or editing a full page that was scanned.

Ultimately, the effectiveness of a scanner is no greater than that of the OCR (Optical Character Reader) software that translates the images into meaningful characters. The DataPen comes with OCR software that works perfectly for some text and is almost useless for other types of material.

The DataPen is available for both Macintosh and Windows environments. The software installation is simple and straightforward. Once installed, scanned text—no graphics—is placed either into the clipboard or directly into an application. This will let you import data into a spreadsheet or into your word processor.

Hardware installation consists of turning off your computer system and plugging the connector into the parallel port. To attach a printer at the same time, it is easy to connect the printer through the end of the DataPen connector. Power for the DataPen can come from any of three sources. The easiest way is to get it directly from the computer. A special cable provided by I.R.I.S. America, fits between the keyboard port and the keyboard. A separate tail splits off to plug into the DataPen parallel connector. A second alternative is to use the provided battery pack that clips onto the back of the parallel connector and holds four AAA batteries. They will power the scanner for about an hour. The third option is to buy a external power supply that can be found in many stores.

Whether you configure the scanner to automatically turn on when you start your computer or only after you launch the software, once everything is installed and selected, the device works like magic—most of the time.

The DataPen comes with sample documents to experiment with. It takes a little getting used to, but then works flawlessly with the samples. After working with these samples, I moved on to text from a book. Again, the DataPen worked perfectly. It would dump the text into the word processor, flawlessly capturing the selected paragraphs. I did have a little trouble on the inside left as the scanner got caught up where the pages were stitched together. If the margins are wide enough, this is no problem.

> Ultimately, the effectiveness of a scanner is no greater than that of the OCR (Optical Character Reader) software that translates the images into meaningful characters.

My final test was with faxed material. In this case, I was not able to get a high enough success rate to recommend the device. On laser printer-quality material there were no problems, but with the more common fuzzy stuff, I did not get a consistently good reading. Sometimes it worked perfectly and at other times I could get nothing more than dots and dashes.

In theory, this problem should not happen. DataPen software comes with a learning device that will enable you to teach the OCR the meaning of any symbol. If you have text that uses symbols that are not understood, you simply scan them in and then tell the software file the meaning. The next time, the symbol will come out correctly. The learning device makes it possible to read any font. In standard printed typefaces, I have had no difficulties.

The DataPen scanner is made in Belgium. The result is that the User's Guide is poorly translated and more difficult to read than necessary. However, you will be able to find anything you need to know, but the wording is often awkward.

While the scanner does amazingly well and fills a void, there are several limitations. You cannot scan a line longer than 11". I think this has to do with the buffer that holds the information before sending it out to the application. It recognizes type sizes only between 8 and 22 points. Red or yellow characters are not recognized. Characters that touch each other, as well as handwriting, are not readable. And finally, text on low-quality paper is not generally recognized. In general, I give high marks to both the scanner and the bundled OCR software.

If you have been waiting for a flexible, lightweight text scanner, wait no longer. The DataPen works and is almost all that I had hoped for.

**MicroByte Computers**
1265 Manassero Street, #306 • Anaheim, CA 92807
Tel (714) 970-0543 • Fax (714) 970-0928

*Your Ultimate Choice for Multimedia*
*Over 1500 CD-Titles in Stock*

| | | | |
|---|---|---|---|
| 101: Best Games Vol. 1 | 10 | Lords of Ring | 20 |
| 101: Best Games Vol. 2 | 10 | MacMillan Dictionary for Children | 15 |
| 7th Guest | 17 | Mad Dog McCree I | 14 |
| AAA Triple Planner | 17 | Mad Dog McCree II | 17 |
| Aces of Europe | 19 | Magicians Cards | 18 |
| Aces of Pacific | 19 | Man Enough | 16 |
| Aegis Guardian | 23 | Mathematics Library | 15 |
| Alien Logic | 18 | Mayo Clinic MPC | 16 |
| Aladdin | 30 | Mayo Clinic Pharmacist | 19 |
| American Talking Dic. | 17 | Mayo Clinic Total Heart | 16 |
| Armenth | 17 | MS: Ancient Lands | Call |
| Arthur's Teacher Trouble | 13 | MS: Baseball | Call |
| Beneath the Steel Sky | 25 | MS: Book Shelf 94 | Call |
| Betrayal of Kondors | 20 | MS: Cinemania | Call |
| Bible Library | 19 | MS: Dangerous Creatures | Call |
| Blood Net | 24 | MS: Dinosaurs | Call |
| Blue Force | 18 | MS: Encarta 1995 | Call |
| Carmen SanDiego | 15 | MS: Golf | Call |
| Civilization | 20 | MS: Money 1994 | Call |
| Clip Card Cornucopia | 16 | MS: Musical Instrument | Call |
| Clipart Warehouse | 12 | MS: Office Professional | Call |
| Comanche | 25 | MS: Works | Call |
| Comptons Encyclopedia 95 | 20 | Myst Box | 40 |
| Comptons Family Choice | 15 | National Parks DOS | 10 |
| Corridor 7 | 19 | New Kid Edutainment | 12 |
| Critical Path | 16 | Nick Faldo Golf | 16 |
| Cyclones | 19 | Outpost | 22 |
| Dark Legion | 21 | Penzar General | 19 |
| Dark Seed | 15 | Police Quest IV | 19 |
| Dark Sun | 19 | Power Rangers | 16 |
| Dinosaurs Encyclopedia | 14 | Psychotron | 18 |
| Dinosaurs Safari | 10 | Putt Putt Goes to Moon | 19 |
| Dog Fight | 24 | Quantum Gate | 16 |
| Doom II | 38 | Quick & Easy Spanish | 18 |
| Doom: Companion | 13 | Raven Loft | 20 |
| Dracula Unleashed | 21 | Rebel Assault | 26 |
| Dragon Lair | 21 | Return to Zork | 15 |
| Dr. Book of Home Remedy | 16 | Reunion | 22 |
| Family Doctor | 14 | Shadow Caster | 29 |
| Great Naval | 19 | Sim City 2000 | 18 |
| Grolier 1995 | 20 | Star Crusader | 21 |
| Hell Cab | 22 | Star Trek 25th Anv. | 23 |
| INCA II | 19 | Syndicate Plus | 27 |
| Indiana Jones | 17 | TFX | 28 |
| Infopedia | 19 | Trump Castle | 14 |
| Iron Helix | 16 | Tune Land | 20 |
| Journeyman Project Turbo | 16 | Virtual Vegas Vol. 1 | 20 |
| Jurasic Dinosaurs | 12 | Who Killed Sam Ruppert | 13 |
| Just Grandma & Me | 13 | Who Shot Johnny Rock | 18 |
| Lands of Lore | 20 | Wiggins Story Land | 19 |
| Leisure Suit Larry | 22 | X-Com | 24 |
| Lion King | 30 | | |

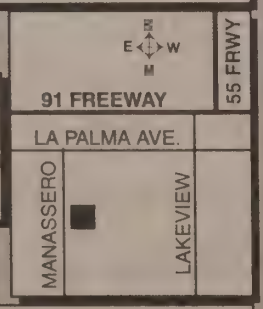
**MONITORS**
* 14" .28 DPI SVGA ..... $180.00
* 14" .28 DPI SVGA NI ..... $195.00

**TOP 10 CD-COMBO**
Blue Force, INCA II, Red Baron, 1st Emperor of China
World Ring, Family Dr., Asopes Fables, Halarious
World Literary, Magic Death
All on separate CD's ..... $36.00

**AST 486SX-25 NoteBook ..... $899.00**
**Call for other AST products.**

**SOUND CARDS**
Sound Blaster MCD-16 ..... $85.00
Sound Blaster 16 SCSI ..... $137.00
Sound Blaster AWE32 ..... $270.00

**ACCESSORIES**
Caddy's .... 5 pcs. $16.99
CD-Case .. 10 pcs. $4.00
Joystick, Mouse,
Mousepad, Etc. .. Call




**CD-ROM**
Mitsumi 4xI ..... $195.00
Teac 4xI ..... $199.00
Funai 2xI ..... $105.00
Toshiba 4xI SCSI ..... $299.00

**MULTIMEDIA UPGRADE KIT**
Double Speed CD-ROM, SB-16 Sound Card,
Speakers, and Bundle of CD's ..... $199.00
4x Speed CD-ROM, SB-16 Sound Card,
Speakers, and Bundle of CD's ..... $299.00

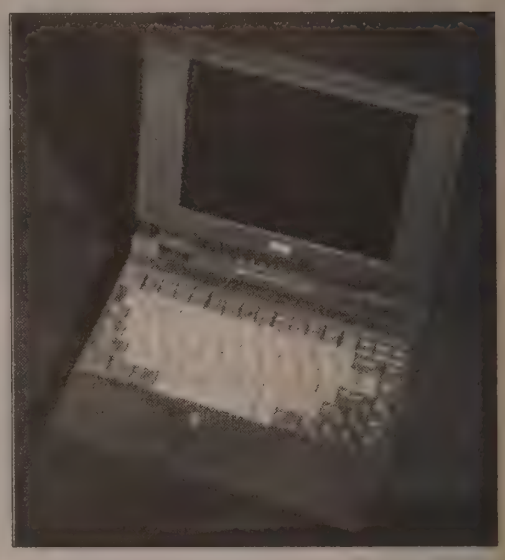
**Sound Blaster Discovery CD-16 ..... $235.00**
**Sound Blaster Digital School ..... $249.00**

NOT RESPONSIBLE FOR ANY TYPING ERRORS.




# Computer Of The Month

## Zeos Meridian 800



**When setting** out to buy a portable computer, you are initially faced with the choice of buying from a local dealer or ordering through the mail—well, actually ordering over the phone in most cases. The advantages of local purchase are that you can get in-person service and advice and also that you can "try before you buy." But the advantages of ordering over the phone are that you are often getting the lowest price on that model and, in the case of Zeos, you will have twenty-four hour service as close as your phone.

Zeos has long been one of my favorite mail-order manufacturers. Everyone I know who has bought from Zeos has been satisfied with both the product and the follow up service. Its newest high-end notebook is a pleasure to use and comes loaded with features.

The Meridian 800 is a full-size notebook weighing 6.3lbs., measuring 8.9" x 11.7" x 1.9", and offering a fast Intel 486 DX4-100 processor. The one I tested had 8MB of RAM and a 350MB hard drive. The same basic computer comes with as small a configuration as 4MB of RAM and a 175MB hard drive powered by an Intel DX2-50 processor. The starting price for the Meridian line is $2295. The top of the line configuration lists for $3995 with all the goodies including an active matrix color display.

The screen measures a huge 10.3" diagonally. This makes working in Windows a breeze. Zeos includes Windows for Workgroups preinstalled and ready to go. If you need a larger display, an SVGA monitor easily plugs into the video port on the back of the machine. You can set the monitors so that either or both will display for you. If you choose the active matrix display, you gain in quaility but loose a little in display size. The video system is local bus with 1MB of video memory.

The keyboard on the Meridian 800 is as good as they get on portables. If that isn't enough, you can attach a keyboard of your choice. A pointing device has become a necessity these days and Zeos has built in the best of the available options, a TruePoint button located just below the keyboard. The TruePoint, the size of a pencil eraser, moves the pointer in any direction you push the button. The faster you push, the more rapidly the pointer moves. This beats trackballs to pieces. If you prefer a standard mouse, you can easily attach one through either the mouse port or the serial port on the back of the computer.

The Meridian comes with a nickel metal hydride battery. It recharges in just over an hour. An extra battery pack ($99) is included with the high-end configurations. The AC adapter either powers the computer or recharges the battery pack, but not both. This may account for the quick recharge time.

This notebook complies with the EPA Energy Star standards, assuring you of the highest energy efficiency. A setup program lets you configure the system to any degree of power conservation you want. And like all good computers these days, there are two PCMCIA Type II slots that can also function as a single Type III slot.

In addition to Windows, the unit comes with MS-DOS, Lotus Organizer, and a nylon carrying case that has room for more than just the computer.

A final feature provided by Zeos is a thirty day money-back guarantee. If you don't like the computer, simply return it for a full refund. If you like it, you are protected by a one year warranty.

**RESOURCES:**
**Meridian 800C Color Notebook, $2295 and up**
Zeos International, Ltd.
1301 Industrial Blvd.
Minneapolis, MN 55413
1-800-423-5891


Copyright © 1995 by Ed Kahn. All rights reserved.

MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE

SHARP • EPSON • TOSHIBA • OKIDATA • CONNER • MAXTOR • AST • IBM • SHARP • EPSON • TOSHIBA • FUJITSU • SYQUEST • KFC • VIEW SONIC • HEWLETT PACKARD

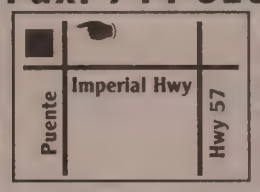
PACKARD BELL • AT&T • COMPAQ • NEC • ZENITH • LIBREX • TWINHEAD • PACKARD BELL • AT&T • COMPAQ • NEC • ZENITH • LIBREX • TWINHEAD • OKIDATA • CONNER • MAXTOR • AST • IBM

# WHOLESALE PRICES TO THE PUBLIC

# MicroSource COMPUTERS

1215 W. Imperial Hwy., Ste. 100 Brea, CA 92621

Phone: 714-526-0184
Fax: 714-526-0183




DISCOVER · AMERICAN EXPRESS · VISA · MasterCard

FINANCING AVAILABLE

WE WILL TRY TO BEAT OR MEET ANY ADVERTISED PRICE

Leasing Option Available Up to $2 Million to Business Owners

Open 7 Days Mon-Fri 10:00 am-7:30 pm, Sat 10:30 am-4:30 pm

## 486DX2-66 VLB w/256K CACHE MULTIMEDIA DREAM SYSTEM

GREEN PENTIUM READY

INCREDIBLE SALE

- 420MB HDD, 4MB RAM, 1.44MB FDD
- 14" SVGA Energy Saver Color Monitor
- 32 Bit 1MB SVGA VLB Window Accelerator
- 32 Bit Fast VESA Local Bus Controller
- Digital Case w/230W Power Supply
- 101 Enhanced Keyboard

$849

**486DX2-66 VLB w/ 256K CACHE**
**SONY DOUBLE SPEED CD-ROM**
**16 BIT SOUND CARD**
**COMPLETE MULTIMEDIA**

$1029

**15" SVGA Monitor, 540MB HDD, Fax Modem, Panasonic/Sony Double Speed CDR 16 Bit Multi CD Sound Card w/Amplified Speakers, Titles & Above**

$1239

## 100MHz POWER 486DX4-100 VLB w/256K CACHE

- 420MB HDD, 4MB RAM
- 14" SVGA Color Monitor
- 32 Bit 1MB SVGA Video Card
- 32 Bit VESA Local Bus Controller
- Digital Case w/230W, 1.44MB FDD
- 101 Enhanced Keyboard

$979

**Multimedia $1169**

## 486-66MHz VLB COMPLETE SYSTEM

- 14" SVGA Color Monitor
- 2MB RAM, 1.44MB FDD
- 250MB Hard Drive
- 2S, 1P, 1G Port Controller
- Digital Case w/230W PS
- SVGA Card
- 101 Enhanced Keyboard

$699

## MOTHERBOARDS w/ CPU & Cache

| | |
|---|---|
| 386DX-40 w/CPU & Math Co Processor | $81 |
| 486 SLC2-66 IBM w/64K Cache | 139 |
| 486 DX2-66 4 PCI 4 ISA w/256K Cache | 249 |
| Intel 486DX2-66 VLB Green Pent. Rdy. 256K | 249 |
| AMD 486DX2-80 VLB Green Pent. Rdy. 256K | 239 |
| 486DX4-100 VLB Green Pent. Ready 256K | 359 |
| IBM Blue Lightning 256K | 229 |
| Pentium 90MHz w/CPU & 256K Cache | 749 |
| Pentium 66MHz w/CPU & 256K Cache | 559 |
| Pentium 60MHz w/CPU & 256K Cache | 519 |

## SIMMS MEMORY

| | |
|---|---|
| 1MB 70n/s | $32.99 |
| 4MB 70n/s | 109.99 |
| 4MB 72 Pins | 133.99 |
| 8MB 72 Pin | 269.99 |
| 16MB 72 Pin | 399.99 |
| 32MB 72 Pin | 799.99 |

**486DX2-66**
w/256K Cache 3VLB
ZIF Socket, Pentium Ready
Green Motherboard w/CPU
ONLY $185.99

**COLORADO 250MB TAPE BACK-UP**
$129.99

## PENTIUM PCI 90MHz

- 256K Cache Expandable to 512K
- Super Digital Mid Tower
- 8MB RAM, 1.44MB FDD
- 420MB Fast IDE HDD
- 14" SVGA Color Monitor
- Diamond Speedstar PCI 1MB Win and DOS Accelerator
- PCI IDE 2S, 1P, 1G Controller
- 101 Enhanced Keyboard

$1539

| | |
|---|---|
| Pentium 66MHz | $1299 |
| Pentium 60MHz | $1259 |

## 486DX2-80MHz VLB COMPLETE MULTIMEDIA SYSTEM

- Green Pentium Ready Motherboard
- Fast Double Speed CD ROM Drive
- Labtec SS700 Amplified Speakers
- 2 CD Titles
- 14" SVGA Color Monitor
- 4MB RAM, 1.44MB FDD
- 420MB HDD, SVGA Card
- 32 Bit 4 HDD/2 FDD VLB Controller
- Digital Case w/230W Power Supply
- 101 Enhanced Keyboard

$1049

## MULTIMEDIA UPGRADE KIT

**MITSUMI/TEAC QUAD SPEED**

- 4X CD ROM Drive
- Sound Blaster 16 by Creative Lab
- Labtec SS700 Amplified Speakers
- 2 CD Titles

$259

**SONY DOUBLE SPEED 55E**

- 2X Speed CD ROM Drive
- 16 Bit Sound Card
- 14 CD Titles w/Encyclopedia
- Labtec SS700 Amplified Speakers

$189

**QUAD SPEED SCSI II**

- Toshiba 3501B 4X Speed CDR
- Seek Time 120ms
- Labtec SS700 Amplified Speakers
- Sound Blaster 16 SCSI II

$379

DISCOVERY 16/SCHOOL HOUSE $CALL

## CD ROM DRIVES

| | |
|---|---|
| Toshiba SCSI 3501B Quad Speed | $270.99 |
| Mitsumi Quad Speed IDE | 179 |
| TEAC Quad Speed | 184 |
| Sony 55E Double Speed | 99 |

CD TITLES AVAILABLE

**CREATIVE LABS**

| | |
|---|---|
| Sound Blaster 16 Bit MCD | $69 |
| Sound Blaster 16 SCSI II | 99 |
| Sound Blaster Awe 32 | 239 |

## SUPER BUY IN HARD DRIVES

**CONNER**

| | |
|---|---|
| 420MB IDE 12ms | $159.99 |
| 540MB IDE 12ms | 189.99 |
| 540MB SCSI II | 207.99 |
| 850MB IDE 12ms | 259.00 |
| 1GB SCSI II 9ms | 449.99 |
| 1.2GB IDE 12ms | 369.99 |
| 2.1GB SCSI II 8.5ms | 798.00 |

**QUANTUM**

| | |
|---|---|
| 540MB IDE 11ms | $189.99 |
| 540MB SCSI II 11ms | $207.99 |
| 730MB SCSI 11ms | 223.99 |
| 1.08GB SCSI II 8.5ms | 495.99 |
| 2.1GB SCSI II 9.5ms | 853.99 |
| 4.1GB SCSI II 8.6ms | 1529.99 |

**WESTERN DIGITAL**

| | |
|---|---|
| 420MB IDE | $171.99 |
| 540MB IDE | 193.00 |
| 1GB IDE | 365.99 |

**MAXTOR**

| | |
|---|---|
| 540MB 12ms | $189.99 |
| 850MB | 238.00 |
| 1.2GB | 360.00 |

**MICROPOLIS**

| | |
|---|---|
| 1GB SCSI II 8.8MS | $512.99 |
| 2GB SCSI II 9MS | 949.99 |
| 3GB SCSI II 12MS | 1059.99 |
| 4.3GB SCSI 8.5MS | 1579.99 |
| 9.0GB SCSI 12MS | 2859.99 |

## HELP WANTED

Positions available for Store Managers, Sales Reps & Assembly Technicians. Send or fax resume and salary requirements.
No phone calls please.

## 486-40MHz COMPLETE SYSTEM

- 14" SVGA Color Monitor
- 250MB HDD, 1.44MB FDD
- SVGA Card, 2MB RAM
- Digital Case w/230W PS
- 101 Enhanced Keyboard
- 2S, 1P, 1G

$569

## PRINTERS

| | |
|---|---|
| HP DeskJet 540 | $264.99 |
| HP DeskJet 560C | 439.99 |
| HP LaserJet 4 Plus | 1309.99 |
| HP LaserJet 4P | 884.99 |
| HP 4L | 488.99 |
| HP 4MP | 1245.99 |
| HP 4ML | 929.99 |
| HP LaserJet 4V | 1839.99 |
| Canon BJC-600 Color InkJet | 398.99 |
| Canon 4000 | 349.99 |
| Canon BJ-200E BubbleJet | 199.99 |
| Canon BJ-105X BubbleJet | 229.99 |
| Epson Stylus 800+ | 229.99 |
| Epson Stylus 720 Color | 499.99 |
| Epson Action Laser 1500 | 499.99 |
| Okidata 400E | 419.99 |

## WE OFFER COMPUTER TRAINING FOR NEW PC OWNERS CALL FOR REGISTRATION

All systems come with 1 year parts and labor warranty. Prices and product availability are subject to change without notice. Call for current prices. We are not responsible for typographical errors. Prices reflect a 3% cash discount.

MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE

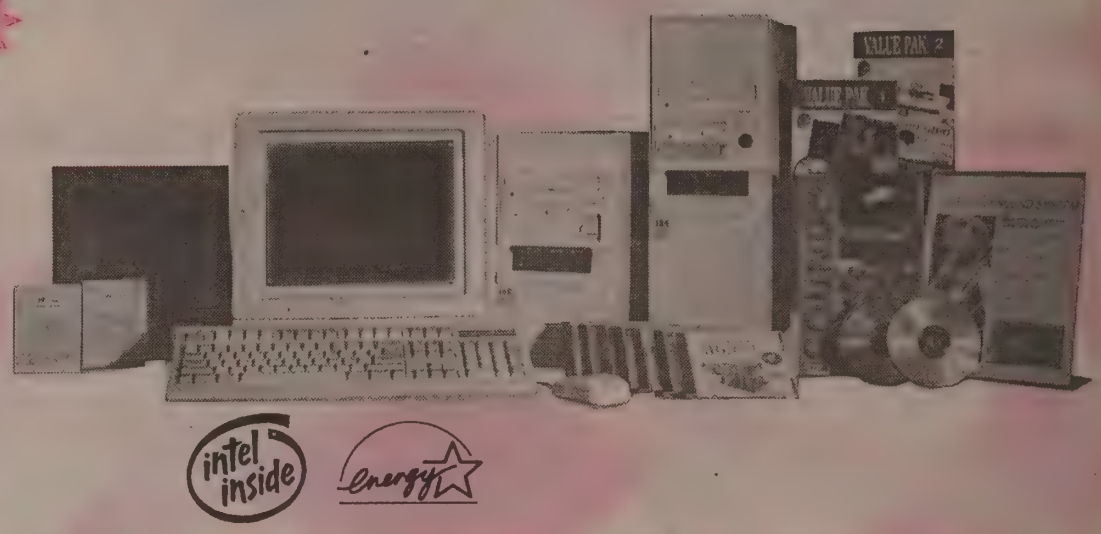
# ALWAYS THE BEST BUY IN MULTIMEDIA!

## Pentium 90/100 Multimedia — BEST BUY

- 4x Quad Speed Photo CD-ROM
- "Creative Lab" Sound Blaster 16
- 2 High Class Speakers
- 8MB RAM & 256K Cache
- 830MB Fast IDE HD
- 1.44 Floppy Drive
- 2 High Speed Serial & 1 Enhanced Parallel Port
- PCI Windows Accelerator 2MB SVGA Card
- 15" 1280x1024 NI "GREEN" SVGA
- 101 Enhanced Keyboard, Hi-Res 3 Button Mouse
- Middle Tower Case w/230W "UL" Power

90MHz... $2150
100MHz.. $2295

$65 Per Month O.A.C.




## Pentium 75 Multimedia — LOWEST PRICE

- 2x Double Speed Photo CD-ROM
- 16 Bit Sound Card
- 2 High Class Speakers
- 8MB RAM & 256K Cache
- 560MB Fast IDE HD
- 1.44 Floppy Drive
- PCI IDE w/2 Serial & 1 Parallel Port
- PCI Windows Accelerator w/2MB SVGA Card
- 14" 1024 .28 NI "GREEN" SVGA
- 101 Enhanced Keyboard, Hi-Res 3 Button Mouse
- Middle Tower Case w/230W "UL" Power
- 2 16550 Serial, 1Bi-Di Parallel

$1650

$64 Per Month O.A.C.

## 486DX2-66 Multimedia — BEST BUY

- 14,400 Fax Modem (w/WinFax)
- 2x Double Speed Photo CD-ROM
- 16 Bit Sound Card
- 14 CD Titles (Encyclopedia...)
- 2 High Class Speakers
- 4 MB Ram & 256K Cache
- 560MB Fast IDE HD
- 1.44 Floppy Drive
- VLB IDE w/2 Serial & 1 Parallel Port
- VLB Windows Accelerator w/1MB SVGA Card
- 14" 1024 .28 NI "GREEN" SVGA
- 101 Enhanced Keyboard, Hi-Res 3 Button Mouse
- Mini Tower Case w/230W "UL" Power

$1150

$42 Per Month O.A.C.

## Pentium 100 Multimedia — SUPREME

- Toshiba 4X Quad Speed SCSI Multi-Session Photo CD-ROM
- "Creative Lab" Sound Blaster 16SCSI and 14 CD Titles
- 2 High Class Speakers
- 16 MB Ram & 256K Cache
- Adaptec 2940W PCI Controller
- 1.06 GB Fast SCSI HD and 1.44 MB Floppy Drive
- 2 High Speed Serial & 1 Enhanced Parallel Ports
- Diamond Stealth 64 PCI 2 MB SVGA Card
- MAG 17" 1280 .28 NI "GREEN" SVGA
- 101 Enhanced Keyboard, Hi-Res 3 Button Mouse
- Middle Tower Case w/230W "UL" Power

$3395

$105 Per Month O.A.C.

## VLB 486 DX2-33/66 Office Station

- 4MB RAM
- 560MB HD
- 1.44MB FD
- VLB IDE w/IO
- VLB SVGA w/1MB
- Acer 14" NI 1024 x 768 Monitor
- 101 Enhanced Keyboard, Mouse
- Mini Tower Case

33MHz..... $860
66MHz..... $899
Upgrade to 8MB ..... CALL

## MULTIMEDIA PACKAGES

2x Double Speed Multi-Session Photo CD
16 Bit Sound Card
2 Speakers
14 CD Titles

2X $200

2x Double Speed Multi-Session Photo CD
Sound Blaster 16-by "Creative Lab"
2 Speakers
15 CD Titles (Aldus Photostylus, Encyclopedia...)

2X $245

4x Quad Speed Multi-Session Photo CD
Sound Blaster 16-by "Creative Lab"
115W Speakers
14 CD Titles (Encyclopedia...).

4X $348

Toshiba 4x Quad Speed SCSI Multi-Session Photo CD
Sound Blaster 16 by Creative Lab SCSI
115W Speakers
14 CD Titles (Encyclopedia...)

4X $478

## CD PACKAGES

**MIS CD Package Encarta..... $68**

**14 CD Titles Package Encyclopedia..... $35**

**10 CD Family Pack ..... $50**

## SOUND CARD

| | |
|---|---|
| Sound Blaster 16 | $79 |
| Sound Blaster 16 SCSI | 105 |
| Sound Blaster 32 AWE | 279 |

## CD-ROM DRIVES

| | |
|---|---|
| Sony 2x CD | $115 |
| NE 3x SCSI CD | 249 |
| Teac 4x CD | 199 |
| Toshiba 4x SCSI CD | 288 |

## SPEAKERS

| | |
|---|---|
| 100 Watt Power Amplified | $45 |
| 125 Watt Power Amplified | 75 |

**Authorized Dealer for:** HEWLETT PACKARD · Apple® Computer, Inc. · COMPAQ · EPSON · Canon · IBM

# Your Complete Computer Resource!

Since 1988!

## Apple Power Mac

### Power Macintosh™ 6100/66/CD

- 66MHz Power PC
- 1MB VRAM Video Card
- 8MB RAM, 350MB HD
- CD ROM
- 16 Bit Stereo Sound In/Output
- System 7.5
- Monitor & Keyboard Not Included

$1895

### Power Macintosh™ 8100/80/AV/CD

- 100MHz Power PC
- 2MB VRAM Video Card
- 16MB RAM, 1 GB HD
- CD ROM
- Ethernet, 3NuBus Slots
- System 7.5

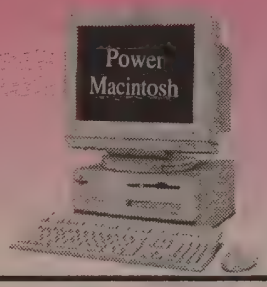
$4295

### Power Macintosh™ 7100/80/CD

- 66MHz Power PC
- 1MB VRAM Video Card
- 8MB RAM, 700MB HD
- CD ROM
- Ethernet, 3NuBus Slots
- System 7.5

$2995

Authorized Dealer

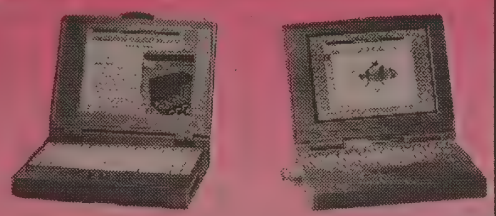



## Epson

- 486DX2-50MHz
- 4 MB exp. to 20 MB
- 260 MB HD, 1.44 MB FD
- 10.3" Dual Scan Screen
- 16mm Center Trackball
- 2 PCMCIA II or 1 PCMCIA III
- VLB Accelerated Card w/1MB

Software:
- MS DOS, Windows, Prodigy, America Online, ClarisWorks

$1799



| | |
|---|---|
| ActionLaser 1100 300 dpi | $389 |
| ActionLaser 1400 600 dpi | 649 |
| Stylus Color 720 dpi | 515 |
| LQ-570+ | 245 |
| LQ-1070+ | 395 |

## Hewlett Packard

### Hewlett Packard Printers & Scanners

| | |
|---|---|
| HP DeskJet/DeskWriter 320 (Color Option) | $285/285 |
| HP DeskJet/Desk Writer 540 (Color Option) | 275/275 |
| HP DeskJet/DeskWriter 560C | 456/456 |
| HP DeskJet 1200C/1200C Postscript | 1315/1925 |
| HP LaserJet 4L/4ML | 499/890 |
| HP LaserJet 4P/4MP | 915/1295 |
| HP LaserJet 4 Plus/4M Plus | 1348/1855 |
| HP LaserJet 4SI/4SI MX | 2785/3995 |
| HP LaserJet 4V/4MV | Call/Call |
| HP Color LaserJet | Call |
| HP ScanJet 3P (IBM or MAC) | Call |
| HP ScanJet IICX (IBM or MAC) | 745* |

*After Rebate. All printers include free cable.

**WE HONOR GOVERNMENT, CORPORATE & SCHOOL P.O.'s**

All prices, specifications, and product availability are subject to change without prior notice. Not responsible for any typographical errors. Financing figures are estimated and based on 36 months and financing is on approved credit. Prices reflect 3% cash discount. C.O.D. order accepted. All systems come with 1 year parts and labor limited carry-in warranty. All brand names are trademarks of their respective companies. All sales are final.

### Control Card

| | |
|---|---|
| IDS IDE I/O | |
| ISA IDE W/16550 I/O | |
| VLB IDE I/O | |
| VLB IDE W/16550 I/O | |
| PCI IDE | |
| PCI SCSI-II (NCR ChipSet) | |
| PCI Adaptec-2940 SCSI-2 | |
| PCI Adaptec-2940W SCSI-3 | |

### Fax/Modem

| | |
|---|---|
| US Robotics 14.4 INT. | |
| US Robotics 14.4 EXT. | |
| US Robotics 28.8 INT. V.34 | |
| US Robotics 28.8 EXT. | |
| Rockwell 14.4 INT. | |
| Rockwell 14.4 EXT. | |
| Intel 14.4 PCMCIA | |
| 14.4 PCMCIA | |

### Floppy Drive

| | |
|---|---|
| Teac 1.2MB, 5 1/4" | |
| Teac 1.44MB, 3 1/2" | |
| Teac 1.2 & 1.44MB Combo | |
| Mitsumi 1.2 MB 5 1/4" | |
| Mitsumi 1.44MB, 3 1/2" | |
| Epson 1.2MB, 5 1/4" | |
| Epson 1.44MB, 3 1/2" | |

### Hard Drive

| | |
|---|---|
| Conner 420MB IDE, 12ms | |
| Conner 540MB IDE, 12ms | |
| Conner 850MB IDE | |
| Conner 1.2GB IDE | |
| Conner 540MB SCSI-2 | |
| Conner 1.0GB SCSI-2 | |
| Conner 2.0GB SCSI-II | |
| Maxtor 270MB IDE | |
| Maxtor 420MB IDE | |
| Maxtor 540MB IDE | |
| Western Digital 1.0GB IDE | |
| Western Digital 850MB IDE | |
| Quantum 540MB IDE | |
| Quantum 730MB IDE | |
| Quantum 1.0GB IDE | |
| Quantum 2.0GB SCSI | |
| Samsung 420MB IDE | |
| Samsung 540MB IDE | |

### Motherboard

| | |
|---|---|
| P5-90/100 EISA/PCI Dual CPU | |
| P5-90 PCI Intel Plato w/256K | |
| P5-90/100 PCI w/256, IDE I/O | |
| P5-60/66 PCI w/256K | |
| 486DX4/DX2 PCI w/256K | |
| 486DX4/DX2 VLB w/256K | |
| 486SLC2-66 VLB | |
| 386DX-40 w/CPU & 128K | |

### Case

| | |
|---|---|
| Mini Tower w/230W | |
| Mini High Tower w/230W | |
| Mid Tower w/230W | |
| Full Tower w/250W | |

### RAM

| | |
|---|---|
| 30Pin 1x3 Simm, 70ns | |
| 30Pin 4x9 Simm, 70ns | |
| 72Pin 1x32 Simm, 70ns | |
| 72Pin 2x32 Simm, 70ns | |
| 72Pin 4x32 Simm, 70ns | |

### Keyboard

| | |
|---|---|
| Bits 101 Enhanced | |
| Maxiswitch 101 Enhanced | |
| Fujitsu 101 Enhanced | |
| Focus 2001 101 Enhanced | |
| Focus 9000 101 Enhanced | |
| MicroSoft Nature Key | |

### Mouse

| | |
|---|---|
| Logitech MouseMan II Serial | |
| Logitech MouseMan II Bus | |
| MicroSoft Mouse, Serial | |
| MicroSoft Mouse, Bus/PS2 | |
| 3 Button Compatible Mouse | |
| TrackBall, Serial | |

### Monitor

| | |
|---|---|
| ViewSonic V21 21", 1600x1280 .28 | |
| ViewSonic V17 17", 1600x1280 .28 | |
| ViewSonic V17G 17", 1280x1024 .28 | |
| ViewSonic V15 15", 1280x1024 .28, 60Hz | |
| ViewSonic V15ES 15", 1024x768 .28, 76Hz | |
| MAG MXP-17F, 1600x1280, .26 | |
| MAG MX-17F, 1280x1024, .26 | |
| MAG DX-17F, 1280x1024, .26 | |
| MAG DX-15F, 1280x1024, .28 | |
| CTX 1765GM 17", 1280x1024 .28 | |
| CTX 1565GM 15", 1024x768 .28 | |
| CTX 1451ES 14", 1024x768 .28 | |
| Acer 76I 17", 1280x1024 .27NI, Digital | |
| Acer 56L 15", 1280x1024 .28 Digital | |
| Acer 34T 14" , 1024x768 .28NI, EPA | |
| NEC XE21, 1280x1024 .28, 60Hz, LR | |
| NEC XP21, 1680x1200 .28, 70Hz, LR | |
| NEC XE17, 1024x768 .28, 76Hz, LR | |
| NEC XP17, 1280x1024 .28, 76Hz, LR | |
| NEC XE15, 1024x768 .28, 76Hz, LR | |
| NEC XP15, 1024x768 .28, 76Hz, LR | |

### Tape Backup

| | |
|---|---|
| Colorado Jumbo 250MB EXT. QIC-80 | |
| Colorado Jumbo 250MB INT. QIC-80 | |
| Colorado PowerDat 2.0GB INT, SCSI | |
| Colorado PowerDat 2.0GB EXT, SCSI | |
| Colorado PowerDat 4.0GB INT, SCSI | |
| Colorado PowerDat 4.0GB EXT, SCSI | |
| Colorado Jumbo 350MB INT. QIC-80 | |
| Colorado Jumbo 350MB EXT. QIC-80 | |
| Conner 250MB INT. QIC-80 | |
| Conner 250MB EXT. QIC-80 | |
| WangDat 1.0GB INT. SCSI | |

### Video Adapter

| | |
|---|---|
| ATI Math-64 PCI/VLB w/4MB VRAM | |
| ATI Math-64 PCI/VLB w/2MB VRAM | |
| ATI Math-64 PCI/VLB w/2MB DRAM | |
| ATI Math-32 PCI/VLB w/1MB DRAM | |
| Diamond Stealth-64 PCI/VLB 4MB VR | |
| Diamond Stealth-64 PCI/VLB 2MB VR | |
| Diamond Stealth-64 PCI/VLB 2MB DR | |
| Diamond Stealth-64 PCI/VLB 1MB DR | |
| Orchid Kelvin-64 PCI/VLB w/2MB | |
| Cirrus Logic 5428 VLB w/1MB | |
| Trident 9400 VLBw/1MB | |
| Trident 9420 PCI w/2MB | |
| Trident 8900 ISA w/1MB | |
| #9 Maxtor | |

**90 Days**
Same as Cash
Financing Available
Subject to credit approval.
We Accept

VISA MasterCard AMERICAN EXPRESS

Protect Your PC Investment
We offer 4 YEAR On-Site Service
Contract GE Consumer Service

# Pasadena Computer

(818) 568-1088 Fax (818) 568-9132

1756 E. Colorado Blvd., Pasadena, CA 91106

**Hours:**
Mon-Fri 9:00-6:00
Sat 10:00-5:00

# WE CONFIGURE

## ATC Pentium 90

Mid-Tower Case
Reliable Intel Neptune Chipset
Intel P5 CPU
8MB RAM w/256K Cache
Fast IDE 850MB Hard Drive
Reliable Teac 1.44MB Floppy Drive
64bit PCI SVGA Display Card w/1MB
64bit PCI Hard Floppy Controller w/2 Serial, Parallel Ports
14" SVGA .28 NI Monitor
101 Enhanced Keyboard
Microsoft Comp. HiRes Mouse

Reg. $1895 Cash $1795

*All systems include a mouse!*

## ATC Pentium 90 - Works

Full Tower Case w/10 Drive Bay
Reliable Intel Neptune Chipset
Intel P5 CPU
16MB RAM w/256K Cache
Fast IDE 1 Gig. Hard Drive
Reliable Teac 1.44MB Floppy Drive
64 bit ATI Mach64 w/2MB
64 bit PCI Hard Floppy Controller w/2 Serial, Parallel Ports
17" Impression 7 Monitor
Fujitsu 101 Enh. Keyboard
Microsoft Mouse Ver. 2

Reg. $2895 Cash $2795

## This Month's SPECIAL

- Mini-Tower Case
- Intel 486DX2-66 CPU
- 8MB RAM w/256K Cache
- Fast 540MB IDE Hard Drive
- Reliable Teac 1.44MB Floppy Drive
- 32bit Local Bus 1MB SVGA Card
- 32bit Local Bus Hard Floppy Controller w/2 Serial, Parallel Ports
- 14" SVGA .28 NI Monitor
- 101 Enhanced Keyboard
- Microsoft Comp. HiRes Mouse

| | Reg. | Cash |
|---|---|---|
| VESA | $1195 | $1095 |
| PCI | $1295 | $1195 |

## ATC's Best Priced For Speed
## ATC IBM-75 Cobalt

IBM486 Cobalt Blue Lightning Processor Based
Mini-Tower Case
8MB RAM w/256K Cache
Fast 540MB IDE Hard Drive
Reliable Teac 1.44MB Floppy Drive
32bit VESA SVGA Card w/1MB RAM
On Board VESA Local Bus IDE Hard Floppy Controller
2 Fast 16550 UART Serial & Fast Bi-Direction Parallel Ports
14" SVGA .28 NI Monitor
Fujitsu 101 Enhanced Keyboard
Microsoft Mouse

Reg. $1295 Cash $1195

## Happy Customer List

Department of Water & Power
LA Police Department
UCLA
USC
Xerox
Improv
Toshiba
KCBS
KTLA
Metro
Hard Rock Cafe
RAMPAGE
Improv Driving School
Samy's Camera

# YOUR WAY

ATC CELEBRATES 10 YEARS IN BUSINESS

CALL FOR THE BEST PRICE, BEST DEAL, BEST SERVICE

## ATC'S Multimedia System

Reliable System Board
4MB RAM w/256K or 128K Cache
Mini-Tower Case
Fast 540MB IDE Hard Drive
Reliable Teac 1.44MB Floppy Controller
w/2 Serial, Parallel Ports
32/16 Bit SVGA Card w/1MB RAM
32/16 Bit Hard Floppy Controller
14" SVGA .28 NI Monitor
Fujitsu 101 Enhanced Keyboard
Microsoft Mouse
Quad/Double Speed CD-ROM Drive
16 Bit Sound Blaster Comp. Sound Card
Pair of Shielded Speakers
Head Phone & Microphone
14 CD Title Software

| DOUBLE SPEED CD-ROM | ISA 486SLC-33 REG/CASH | ISA 486SLC2-50 REG/CASH | VESA 486DX2-66 REG/CASH | PCI 486DX2-66 REG/CASH |
|---|---|---|---|---|
| | $1095/**$995** | $1145/**$1045** | $1295/**$1195** | $1395/**$1295** |

*Quad Speed CD-ROM Upgrade .....Add $100*
*15" Monitor Upgrade ..... Add $100*
*4MB Upgrade ..... Add $155*

## ATC's Basic System

Mini-Tower Case
Reliable Motherboard
4MB RAM w/256K or 128K Cache
Fast 540MB IDE Hard Drive
Reliable Teac 1.44MB Floppy Drive
32/16 Bit SVGA Card w/1MB
32/16 Bit Hard Floppy Controller
w/2 Serial, Parallel Ports
14" SVGA .28 NI Monitor
101 Enhanced Keyboard
Microsoft Comp. Mouse

| ISA 486SLC-33 REG/CASH | VESA 486SX-33 REG/CASH |
|---|---|
| $895/**$795** | $1045/**$945** |

| ISA 486SLC2-50 REG/CASH | VESA 486DX2-66 REG/CASH |
|---|---|
| $945/**$845** | $1125/**$1025** |

*PCI Bus Upgrade .....Add $100*
*15" Monitor Upgrade.....Add $100*
*4MB Upgrade .....Add $155*

WE CONFIGURE YOUR WAY

Lifetime Labor Warranty
1 Year Parts Warranty

Free access to BBS (310) 869-1337

## ADD MULTIMEDIA to YOUR PC ECONO MPC

Double Speed CD-ROM Drive
Sound Blaster 16 Comp. Sound Card
Pair of Shielded Speakers
Head Phone & Microphone
14 CD Title Software

Reg. $250 Cash $225

*Quad Speed.....Add $100*

# ATC COMPUTER

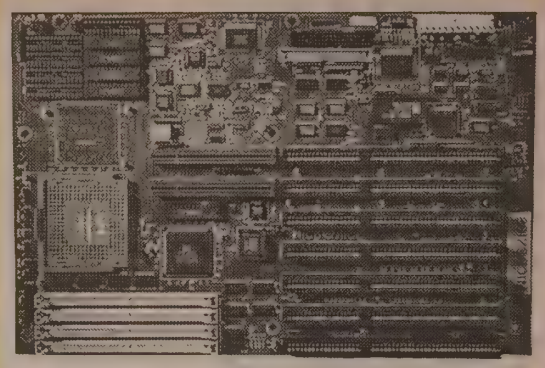
## 5 LOCATIONS TO SERVE YOU!

| ORANGE | HOLLYWOOD | LOS ANGELES | TORRANCE | VAN NUYS |
|---|---|---|---|---|
| 1132 E. Katella Ave. Ste A-16 | 6301 Sunset Blvd. #106 | 7150 Beverly Blvd. | 15800 Hawthorne Blvd. #D | 6411 Sepulveda Blvd. #1J |
| (714) 744-5156 | (213) 962-8610 | (213) 938-6622 | (310) 370-2655 | (818) 988-9806 |

Price subject to change without notice. We are not responsible for misprints.

# MICRONICS

MICRONICS



## MOTHERBOARDS

# ALL MODELS IN STOCK

### THE BEAST

**$1789**

- ★ MICRONICS 90MHz PCI Motherboard/90MHz
- ★ 8MB SIMM Memory: 70ns
- ★ 1.2MB/1.44MB TEAC Floppy
- ★ 420MB Western Digital #2420 Hdrive
- ★ Micronics PCI Hi-Speed Ctlr/Onboard
- ★ Gateway Anykey Programmable Keyboard
- ★ Authorized MICRONICS Distributor
- ★ Many Monitors To Select

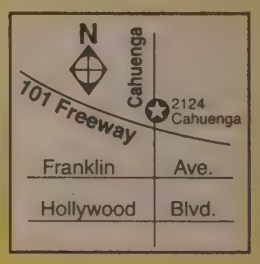
### SON OF BEAST

**$2299**

- ★ MICRONICS 90MHz PCI Motherboard/90MHz
- ★ Stealth 64 Accelerator/2MB
- ★ 16MB SIMM Memory
- ★ 1.2MB/1.44MB TEAC Floppy
- ★ 850MB Western Digital Hdrive
- ★ Micronics PCI Hi-Speed Ctlr
- ★ Gateway Anykey Programmable Keyboard
- ★ Authorized MICRONICS Distributor
- ★ Many Monitors To Select

## CUSTOM NETWORKING & MULTIMEDIA.

IBM · HEWLETT PACKARD · TOSHIBA · COMPAQ · MANZANITA SOFTWARE




7th Year, Member of the Better Business Bureau

## WE STOCK MICRONICS

MICRONICS is a Member of the VESA & PCI Committee

Authorized MICRONICS Distributor Since 1987

* The Intel Logo is a trademark of the Intel Corporation.

# 3-6 COMPUTERS

2124 CAHUENGA BLVD. HOLLYWOOD, CA 90068

PHONE 213 466-3636 • FAX 213 466-3693

**TELECOMMUTING** • BY ROBERT MOSKOWITZ

# Telecommuting Check-Up

## Establishing Self-Management Procedures Can Help Telecommuters Function More Effectively And With Less Stress

**One of the** biggest responsibilities of individual telecommuters who want to remain successful enough to keep their flexible work schedules is to manage themselves well enough to keep doing their jobs productively over the long haul.

Clearly, working away from the office has both positive and negative aspects. There may be fewer distractions away from the office, for example, but there may also be less restraint from overwork or neglect of personal and family matters. It's enjoyable and satisfying to set your own schedule, but it can be draining to work without an externally established framework.

Fortunately, it's fairly easy to establish simple, "direct systems"—or "self-management procedures"—that can help any telecommuter function more effectively, with less stress and less danger of negative fallout from too much flexibility.

However, these systems can require time to take hold. Both novice and veteran telecommuters should allow themselves at least three to four months to become acclimated to any new self-management systems they're trying to put in place.

### Overwork (Or Workaholism)

Telecommuters enjoy their freedom and flexibility for a variety of reasons: because it helps them balance work with family and home life, because it gives them additional quiet time in which to be more creative or productive, or perhaps because it lets them work with less stress and tension.

Whatever the reason, there is the constantly lurking danger that telecommuting will decrease rather than increase your flexibility.

It sounds paradoxical, but once you are within arm's length of your work at almost every hour of the day and night, it becomes far too easy to work longer and longer hours in an attempt to accomplish everything that cries out to be done. After a while, some telecommuters find their work is dominating all of their time, instead of occupying as it should just one place among many different agenda items on your schedule.

One common reason is that, while telecommuting, you rarely receive the same cues to stop work or take a break that you normally encounter at the office. For example, at the office people may frequently walk by your open doorway enroute to a coffee machine or a bathroom. People may invite you out to lunch or disappear from your sight and hearing for an hour during midday. They all make noise or say "goodbye" as they leave for home at 5 or 6 or even 7 pm.

Without these cues and interruptions, it's easy for you to keep on teleworking—perhaps almost endlessly!

This can create its own problems. For example, you can become fatigued, and pass along work containing mistakes you'd normally have caught. It's also possible for overwork to contribute to stress, leading to illness, emotional burnout, or worse.

All this means it's critically important for telecommuters to establish "normal" business hours. It's valuable to have a routine in which you start, stop, and take breaks every day at the same time. You needn't be compulsive about this schedule, of course, but a baseline structure not only tends to prevent overwork, it gets you into a routine that allows you to concentrate more thoroughly and productively during the hours you do work.

**There is the constantly lurking danger that telecommuting will decrease rather than increase your flexibility.**

Maintaining regular hours over a long period of time also helps facilitate communication with those in the main office. Even if you telecommute only one day a week, your manager and coworkers will appreciate knowing when they can expect to reach you and when they can't.

As a telecommuter, you can work far more satisfying hours than the standard 9-to-5 schedule. But maintaining some overlap with other peoples' office hours is usually helpful and productive. You're still free to schedule other work from midnight to 3 am, or from 8 pm to 11 pm, if that's what suits you.

### Procrastination

Although a modest amount of procrastination can have positive benefits (see my book, *How to Organize Your Work and Your Life*, Doubleday, 1993), too much procrastination is probably a short route to the unemployment line.

As a telecommuter, you may be scrutinized more than most other employees to see if you are "producing useful work." That's why most telecommuting training programs and how-to handbooks suggest that you accept assignments in terms of deliverables, and that you work hard to keep in touch with your supervisor to make sure he or she is aware of all you're doing.

But these techniques fail miserably if you let procrastination get the upper hand.

So it's particularly important that you pay attention to your own work habits. Sometimes keeping a "Time Log" is a good idea. By noting the hours you actually work and the projects that occupy your time, you can begin to get a sense not only of when you are strongest and most productive, but when you are weakest and

Telecommuting *continued...*

most prone to procrastination.

You can also see clear signs whenever you are procrastinating too much! The Time Log will show wasted hours, missed deadlines, and late starts on important projects.

Wary of procrastination, telecommuters must consider and counteract a lot of potentially strong reasons for putting off work they should be doing. Among the most common reasons for procrastination, watch out for such possibilities as: simple tiredness, fear of failure, loneliness, reluctance to start a project you're not certain you can finish, simple contrariness, or fear of too much success.

**It's critically important for telecommuters to establish "normal" business hours.**

The best remedy for procrastination is self-discipline. You probably have at least some of this or you wouldn't be successful as a telecommuter. If you can make yourself adhere to reasonable telecommuting work hours, there's a good chance you won't procrastinate as a telecommuter any more than when you're in the main office.

If self-discipline won't work for you, try giving yourself rewards for the hours you put in telecommuting. Every hour, for example, give yourself a ten-minute break. Every two or three hours, give yourself a snack or a nice meal. Every day, give yourself half-an-hour or more of pure relaxation or fun time.

You may also find it helpful to "dress" for work as a telecommuter, even if you're working at home. You may not want to wear your power suit on these days, of course, but something more formal than a bathrobe can help you get into the proper frame of mind to do something useful instead of procrastinating.

If you ponder the problem, you'll probably find many ways to "pay" yourself with rewards for putting your shoulder to that telecommuting work load, and thus avoiding the danger of procrastination that can otherwise sneak up and take you by surprise.

## Scheduling For Telecommuting

Working at home goes better when you can do it in an orderly, effective manner. But since each workspace and each telecommuter is different, you'll probably have to invent your own systems for scheduling your work and keeping to your schedule.

The simplest way is just to pretend your days as a telecommuter are days in your office, and to keep everything as tightly scheduled as you normally do. The main difference would be that working as a telecommuter you can schedule such "non-office" tasks as reading the morning newspaper, taking the kids to school, grocery shopping, walking the dog, taking a

*continued on page 112*


# Strategic Business Solutions

**One-Stop Responsibility in Putting Technology to Work For You**

| Remote Access<br>Mobile Computing<br>Integrated Sales Force Automation | File & Printer Sharing<br>Fax/Modem Sharing<br>Retail Point-of-Sales | Workgroup Discussion, E-mail, Conference<br>Workflow, Document Routing<br>Reference and Tracking | Decision Support System (DSS)<br>Executive Information System (EIS)<br>Geographic Information System (GIS) | Document Imaging<br>Electronic Document Publishing<br>Desktop Video Conferencing |
|---|---|---|---|---|
| Memory | 16MB | +/- $295 | 8 MB | +/-$147 | 4 MB |
| System Bus | PCI | | VLB | | ISA |
| Video Memory | ATI 2 MB | +/- $80 | Diamond Stealth 2 MB | +/- $145 | 1 MB |
| Monitor | 17" | +/- $275 | 15" | +/- $80 | 14" |
| Hard Drive | 1.05 GB | +/- $190 | 540 MB | +/- $78 | 420 MB |
| Processor | Pentium | | 486DX | | 486SX |
| | 90 | 66 | 80 | 66 | 33 | 33 |
| | $2939 | $2719 | $2639 | $1549 | $1499 | $1449 | $799 |

**Hardware Options**

CD-ROM Drives, Tape Backup Drives, Fax/Modems, Audio Cards, Video Cards, Networks, Printers, Scanners

All systems come with I/O ports (2 serial, 1 parallel, 1 game), 1.44 MB floppy drive, keyboard, mouse in a mini-tower enclosure.
Warranty is 1 year parts/2 years labor/Lifetime ∞ support.
Prices are subject to change without further notice.

Call 909-622-1488
909-622-6388 Fax

MDM, Limited
150H South Reservoir Street, Pomona, CA 91766

Let MDM help you research the issues, develop an objective, plot a course, and put technology to work!

# PC SERVICE

WHY BUY FROM US?

WE BUILD TO YOUR SPECS!

We Service What We Sell!
We Won't Rest 'Til It's Right!
We Support Our Customers!

## MULTIMEDIA CORNER

### CD-ROM DRIVES

SONY 55E (2X IDE)
250ms access, 300+KB output .....$121
**NEC 3XE (3X SCSI 2 EXTERNAL)**
**195ms access, 450+KB output, multi-session ..$269**
MITSUMI FX400 (4X IDE)
250ms access, 700 KB output, multi-session ....$189
TOSHIBA XM3501B (4X SCSI 2)
155ms access, 600KB output, multi-session .....$309

### CD-ROM BUNDLES

**SONY 55E 2X CD-ROM Bundle with:**
- Sound Card
- Speakers
- CD Titles

**$199** *COMPLETE*

**NEC 2X CD-ROM Bundle with:**
- Fast, 280 ms, SCSI 2, multi-session
- Media Vision SCSI (16-bit) Sound Card
- 4-Watt Amplified Speakers
- Compton's Interactive Encyclopedia

**$259** *COMPLETE*

**TOSHIBA 4X CD-ROM Bundle with:**
- Fast, 155 ms, SCSI 2, multi-session
- Media Vision SCSI (16-bit) Sound Card
- Labtec/Koss Speakers
- Six popular CD-ROM titles

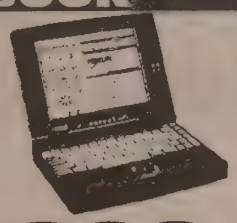
**$434** *COMPLETE*

## SPECIALS

CD Disc Caddy .....$5.99
CD-ROM Assortment from ....$6.99
MultiMedia Speaker Set .....$8.99
MultiMedia Headphones .....$8.99
MultiMedia Microphone .....$9.99
Simple Solutions Software ....$9.95
LABTEC CS700 Speakers ...$18.95
ZOLTRIX 14.4 Internal Fax/Modem .....$74.00
Media Vision 16 (SCSI) Sound Card .....$74.00

## COMPAQ CONTURA NOTEBOOK

- Aero 486Sx25 Subnote
- 4MB RAM
- 80MB Hard Drive
- PCMCIA (Type II)
- DOS 6.2, WINDOWS 3.11, WINLINK (w/Cable) LOTUS ORGANIZER, TABWORKS
- 1.44 External Floppy Drive



**$888**
While Supply Lasts

## 486DX2-66

VESA LOCAL BUS

- 486DX2-66 Vesa LB, 256K Cache
- 4MB RAM
- 1.44MB Floppy Drive
- 420MB Hard Drive
- IDE Vesa LB Controller
- SVGA Vesa LB 1MB
- 14" SVGA 1024x768 Color .28 Monitor N.I.
- 101 Keyboard
- Mini Tower Case
- Serial Mouse
- CPU Cooling Fan

**$1079**

## Pentium-90

PCI/ VLB

- Intel Pentium 90MHz
- P90 Motherboard w/256K Cache & PCI, VLB, ISA slots
- 8 MB RAM
- 15" SVGA Digital, .28 Flat Monitor, 1280x1024 N.I.
- 560MB Hard Drive
- PCI IDE Controller
- Diamond Stealth 64 PCI Video Card w/ 2 MB
- 1.44 MB Floppy drives
- Medium Tower Case
- 101 Keyboard
- Serial Mouse
- CPU Cooling Fan

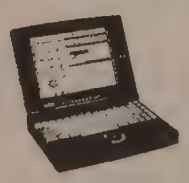
intel inside

**$2099**

## NOTEBOOKS

**486DX2-50 D/S Color**

- 4MB RAM
- 200MB Hard Drive
- PCMCIA
- 1MB Accelerated Video



**$1495**
While Supply Lasts

## UPGRADES

UPGRADE YOUR 286/386 COMPUTER SYSTEM

### MOTHERBOARDS & MEMORY

486DX VLB Motherboard
DX-4 Ready, ZIFF socket,
Accepts 72-Pin Simm Memory .....$109

486DX PCI Motherboard
DX-4 Ready, PCI IDE on-board,
256K Cache, bundled with: PARADISE
BALI 32 PCI,1MB Video Card .....$235

486DX2-66 MHz w/256K Cache,
w/4MB RAM, VLB
486 DX2/66 CPU .....$389

### HARD DISKS & TAPE

420MB DRIVE.....$179
560MB DRIVE.....$199
1GB (IDE) DRIVE.....$419
Conner 250 TAPE KIT w/cart ..$149
Conner 420 TAPE KIT w/cart ...$189

### CARDS

IDE with I/O (ISA).....$13
IDE with I/O (VLB).....$27
SVGA S3, VLB, 1MB (to 2MB) .....$94

## VISIONMASTER™ IDEK iiyama

- 17" FST
- Digital
- 3 yr. Warranty
- .26 Dot Pitch
- 1600x1280

**$779 IN STOCK!**

While Supply Lasts

FACTORY AUTHORIZED REPAIR ON MOST BRANDS

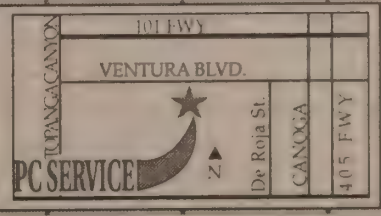
PRICES AND AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE

# PC SERVICE

818-887-0040
818-887-1470 (Fax)

21600 Ventura Blvd. • Woodland Hills CA 91364

Trademarks are property of their respective owners



NETWORKING • BY PETER JOHN HARRISON

# LAN-To-The-Internet, Part II

## What You Need To Connect To And Use The Internet

**Last month** I introduced you to some of the reasons why companies are flocking to the Internet as a place to do business, and gave you some tips on what to look for when you're hunting for an Internet access provider for your business. This column will focus more on the hardware and software you need at your end to connect to and use the Internet.

The things you'll need to connect to the Internet depend on what kind of Internet access your company is interested in. If, for example, all you want is a way to send email messages between people on your LAN and the Internet at large, most major email systems have add-on software packages that let you use a simple, dial-up modem connection to act as a "gateway" between your LAN's email system and the Internet.

If you need a more interactive environment, one that will allow people on your LAN to log in to remote hosts, transfer files, and browse the World Wide Web, or set up your own Internet server, you'll need a more robust "dedicated service" connection to an Internet access provider and TCP/IP client and server software to meet your needs.

Once you've selected an Internet access provider and chosen the type of dedicated connection you will have to connect to their service (see last month's issue), you'll need to acquire a router and the equipment required to connect the router to your dedicated line. Most Internet access providers offer installation packages that include these tools and their configuration, and it's probably best to take them up on their offer, or at least purchase the same brand of equipment they recommend. That way you'll always be able to turn to them if you need help resolving a problem.

Once your dedicated connection is up and running, you'll need client software that will allow users on your LAN to access the Net. If you're running a UNIX-based LAN, chances are you already have the basic tools you need; the TCP/IP protocol suite, which drives Internet communications, and its tools are closely associated with the UNIX operating system, so I'm going to focus on the tools needed to wire up a LAN with Macintosh and PC computers.

PC users have it easy when it comes to finding TCP/IP software that will work on their system. There is a wide range of commercial tools available for MS-DOS and Windows. My favorite commercial tool for Windows is a package from NetManage, called Chameleon. Chameleon comes with all the software you need to set up one PC on the Internet, including thorough documentation and some basic "server" software that will allow users on the Net to ftp in to your LAN and up- or download files, but at $400 a pop, you may find yourself looking for cheaper alternatives.

Fortunately, there are some excellent shareware and freeware alternatives to the expensive commercial products. Products developed not only by shareware entrepreneurs, but also by universities and government agencies. Shareware takes a little more time to work through and set up, and some packages have only minimal documentation, but a full suite of shareware tools that includes all the basic "client" interfaces needed for full Internet access can cost as little as $25 per node—a fraction of the cost of a commercial package. Given the very large cost difference between commercial and shareware products, you may decide it's worth buying shareware for some of your systems, and commercial software for others. I have my shareware and freeware favorites: Trumpet Winsock for the TCP/IP network layer, PC Eudora for email, WS_FTP for ftp file transfers, and Cello or NCSA Mosaic to browse the World Wide Web. You can get these tools and some tips on how to install and use them in *The Internet Direct Connect Kit* (by Peter John Harrison), or from the CICA collection, which is available online on the Internet and on CD-ROM from Walnut Creek CDROM.

For the Macintosh users on your LAN, the best known commercial TCP/IP software suite is Intercon's TCP Connect II for Macintosh (Extended Version). Like its PC/Windows alternative, Chameleon, TCP Connect II comes with excellent documentation and a complete suite of basic TCP/IP tools for accessing the Internet, and it's fairly expensive: $495 for each system you want to connect. So once again, you may find yourself looking for cheaper shareware alternatives.

The first thing you need before you can use the Internet or any TCP/IP application with a Macintosh is MacTCP, from Apple Computer. MacTCP is bundled in with Intercon's TCP Connect II for Macintosh, but can also be had from a number of less expensive sources. Macintosh System 7.5 and later, for example, includes MacTCP with its "Networking Software" installation, or you can get it and some hints on how to set it up with Adam Engst's book *The Internet Starter Kit for Macintosh*, from Hayden Books.

Once you have MacTCP installed, there are many good shareware and free programs available, like Mac Eudora for your email, Fetch FTP for doing ftp file transfers, and NCSA Mosaic for browsing the World Wide Web. Once again, you can find all of these programs online, but unlike its

**The things you'll need to connect to the Internet depend on what kind of Internet access your company is interested in.**

# BINOMIAL SYSTEMS

957 Fairway Drive, Walnut, CA 91789
TEL: (909) 595-8293 ; FAX: (909) 598-4609
Store Hours: Mon-Fri 9AM-6PM SAT by appointment

Novell Certified NetWare Engineer

## NETWORK CARDS

### 3COM

| | |
|---|---|
| **Ethernet 10 Base-T or Coax** | |
| 3C503 Etherlink II ISA 16-bit | 189.00 |
| 3C509 Etherlink III ISA 16-bit | 129.00 |
| 3C509 Etherlink III BISA 16-bit Combo | 149.00 |
| 3C529 Etherlink III MCA 32-bit | 249.00 |
| 3C579 Etherlink III EISA 32-bit | 249.00 |

**3COM CARD ONLY w/o Manuals**

| | |
|---|---|
| 3C509 Etherlink III B Coax (Plug&Play) | 99.00 |
| 3C509 Etherlink III B 10 Base T(Plug&Play) | 79.00 |
| 3C509 Etherlink III B Combo (Plug&Play) | 109.00 |
| 3C579 Etherlink III 32-bit EISA | 229.00 |

| | |
|---|---|
| **Token Ring** | |
| 3C619 Tokenlink III 16/4 ISA 16-bit | 439.00 |
| 3C629 Tokenlink III 16 MCA | 479.00 |
| 3C679 Tokenlink III 16/4 EISA 32-bit | 589.00 |

### ADDTRON

| | |
|---|---|
| **Arcnet** | |
| ARC-120 ISA 8-bit Combo | 55.00 |
| ARC-220 ISA 16-bit Combo | 75.00 |
| **Ethernet 10 Base-T** (Yes, It runs with Netware) | |
| AE-200J/LTN 16-bit Soft.Configurable | 35.00 |
| **Ethernet Coax** Yes, It runs with Netware | |
| PC-16C ISA 16-bit Soft.Configurable | 29.00 |
| **Ethernet Combo** ( Yes, It runs with Netware) | |
| AE-200J/L 16-bit 2-in-1 Soft.Configurable | 39.00 |
| PC-16CT 16-bit 2-in-1 Soft.Configurable | 35.00 |

### ARTISOFT

| | |
|---|---|
| **Ethernet 10 Base-T or Coax** | |
| NodeRunner 2000 ISA 16-bit | 179.00 |
| NodeRunner 2000 MCA | 269.00 |
| NodeRunner 2000/A ISA 16-bit Combo | 239.00 |
| NodeRunner/SI 2000 ISA 16-bit | 89.00 |
| NodeRunner/SI 2000/A ISA 16 Combo | 109.00 |

### D-LINK

| | |
|---|---|
| **Ethernet 10 Base-T or Coax** | |
| D-Link BNC Adapter | 79.00 |
| D-Link BNC & 10 Base-T Combo | 90.00 |
| D-Link PCI Combo ( RJ45/BNC ) | 199.00 |
| D-Link VL-BUS Combo (RJ45/BNC/AUI) | 299.00 |
| D-Link MCA Combo Adapter | 169.00 |
| D-Link EISA Combo (RJ45/BNC/AUI) | 295.00 |

### INTEL

| | |
|---|---|
| **Ethernet 10 Base-T / Coax** | |
| EtherExpress 16 ISA 16-bit | 119.00 |
| EtherExpress 16 ISA 16-bit Combo | 139.00 |
| EtherExpress 16 PRO/10 16 Bit TP | 119.00 |
| EtherExpress 16 PRO/10 16 Bit Combo | 139.00 |
| EtherExpress 16 PRO/10 Flash | 139.00 |
| EtherExpress PRO 10/100 PCI | 239.00 |
| EtherExpress PRO 10/100 EISA | 379.00 |
| EtherExpress 16 ISA Flash | 125.00 |
| EtherExpress 16 MCA 32-bit | 169.00 |

**Intel CARD ONLY w/o Manuals**

| | |
|---|---|
| EtherExpress 16 16-bit Coax | 79.00 |
| EtherExpress 16 16-bit 10 Base T | 109.00 |
| EtherExpress 16 ISA 16-bit Combo | 129.00 |
| EtherExpress 16 ISA Flash | 129.00 |
| EtherExpress 16 PRO/10 16-bit TP | 109.00 |
| EtherExpress 16 PRO/10 16-bit Combo | 129.00 |
| EtherExpress 16 PRO/10 Flash | 119.00 |
| EtherExpress 16 PRO/10 Bit Combo | 129.00 |

### NOVELL EAGLE/MICRODYNE

| | |
|---|---|
| **Ethernet 10 Base-T / Coax** | |
| NE2000 Plus ISA 16-bit | 79.00 |
| NE2000 Plus -3 ISA 16-bit Combo | 99.00 |
| NE/2C MCA | 265.00 |
| NE3210 EISA 32-bit (New Version) | 159.00 |
| NE3200 EISA 32-Bit | 439.00 |
| NTR2000 Token Ring 16-bit | 319.00 |

### SMC

| | |
|---|---|
| **Ethernet 10 Base-T / Coax** | |
| EtherEZ Plug & Play 16-bit Combo | 109.00 |
| Elite 16-Ultra ISA 16-bit | 115.00 |
| Elite 16-Ultra ISA Combo (RJ45/BNC) | 129.00 |
| Elite 32-Ultra EISA Combo(RJ45/BNC) | 239.00 |
| Ethercard Plus Elite16 ISA 16-bit | 125.00 |
| SMC EtherPower PCI Combo | 199.00 |

**SMC CARD ONLY w/o Manuals**

| | |
|---|---|
| Elite 16-Ultra ISA 16-bit Coax | 109.00 |
| Elite 16-Ultra ISA 16-bit 10 Base T | 99.00 |
| Elite 16-Ultra ISA Combo | 119.00 |
| Ethercard Plus Elite 16 ISA 16-bit | 119.00 |

## NETWORK CARDS

### ALLIED TELESIS

| | |
|---|---|
| 1500 Plus DMA 16-bit Ethernet 10 TP | 89.00 |
| 1500 Plus DMA 16-bit Ethernet Combo | 109.00 |
| 1700 Plus ASIC 16 TP | 89.00 |
| 1700 Plus ASIC Combo (BNC/10 TP) | 109.00 |
| 1702 Plus MCA 10 TP | 139.00 |
| 1702 Plus MCA Combo (BNC/10 TP) | 169.00 |

### ASANTE

| | |
|---|---|
| EtherPac 2000+N 16-bit Ethernet Coax | 109.00 |
| EtherPac 2000+T 16-bit Ethernet 10 TP | 89.00 |
| EtherPac 2000+3 16-bit Ethernet Comb | 139.00 |
| EtherPac 2203 EISA Ethernet Combo | 359.00 |

### HEWLETT PACKARD

| | |
|---|---|
| HP JETDIRECT 16-bit Ethernet Coax | 359.00 |
| HP JETDIRECT 16-bit Ethernet 10 TP | 359.00 |
| HP JETDIRECT for Token Ring | 699.00 |

### IBM

| | |
|---|---|
| IBM Lan 16-bit Ethernet Coax | 99.00 |
| IBM Lan 16-bit Ethernet 10 Base T | 89.00 |
| IBM Lan 16-bit Ethernet Combo | 119.00 |

## NETWORK FAST 100 Mbps

*(Bring 100 Mbps to Your Network!)*

### HEWLETT PACKARD-100 Mbps VG

| | |
|---|---|
| **HP 100 Mbps Network Cards:** | |
| Selectable ISA 16-bit 10/100 VG | 349.00 |
| Selectable EISA 32-bit 10/100 VG | 449.00 |
| **HP 100 Mbps Network Hub:** | |
| Advancestack 100 VG 15 Port Hub | 2,999.00 |

### INTEL - 100 Mbps - 100 Base T

| | |
|---|---|
| Intel EtherExpress PRO 10/100 PCI | 239.00 |
| Intel EtherExpress PRO 10/100 | 379.00 |
| **Cables :** Plenum Twisted Pair - Category 5 | |
| Every 25-ft Plenum 10 Base T Cable | 19.00 |
| Category 5 KeyStone Wall Plate | 9.00 |

## NETWORK SOFTWARES

### ARTISOFT

| | |
|---|---|
| Artisoft Sharing Software | 299.00 |
| Artisave Tape Back Up Software | 249.00 |
| Central Station II for Printers & Modems | 439.00 |
| Corestream Server 5 Users w/o Lan 6.0 | 749.00 |
| Corestream Server 10 Users w/o Lan 6.0 | 1,469.00 |
| Corestream Server 25 Users w/o Lan 6/0 | 2,389.00 |
| Lantastic for OS / 2 1 User | 99.00 |
| Lantastic for OS / 2 5 Users | 459.00 |
| Lantastic for OS / 2 10 Users | 819.00 |
| Lantastic for OS / 2 25 Users | 1,399.00 |
| Lantastic 6.0 1 User | 69.00 |
| Lantastic 6.0 5 Users | 349.00 |
| Lantastic 6.0 10 Users | 649.00 |
| Lantastic 6.0 25 Users | 1,299.00 |
| Lantastic 6.0 50 Users | 2,179.00 |
| Lantastic 6.0 1 User Upgrades | 38.00 |
| Lantastic 6.0 5 Users Upgrades | 99.00 |
| Lantastic 6.0 10 Users Upgrades | 145.00 |
| Lantastic 6.0 25 Users Upgrades | 349.00 |
| Lantastic 6.0 50 Users Upgrades | 569.00 |
| Lantastic 6.0 2 Users Starter Kit | 249.00 |

* Includes: 2 NodeRunner/SI 2000 Coax Cards 2 Users Lantastic 6.0 Softwares, 25 ft Cable

### MICROSOFT

| | |
|---|---|
| Windows for Workgroup DOS Add-On | 45.00 |
| Windows for Workgroup WINDOW Add-On | 49.00 |
| Windows for Workgroup 3.11 Full Version | 149.00 |
| Windows NT Workstation V3.5 | 329.00 |
| Windows NT Server V3.5 | 699.00 |

### NOVELL — Cash Only

| | |
|---|---|
| Personal NetWare 1.0 (For Dos & Window) | 75.00 |
| Novell Netware 3.12 Documentation | 179.00 |
| Novell Netware 2.2 Documentation 5pc | 179.00 |
| NetWare 3.12 5 Users | 995.00 |
| NetWare 3.12 10 Users | 1,299.00 |
| NetWare 3.12 25 Users | 1,999.00 |
| NetWare 3.12 50 Users | 2,999.00 |
| NetWare 4.1 5 Users ( New Version ) | 649.00 |
| NetWare 4.1 10 Users ( New Version ) | 1,499.00 |
| NetWare 4.1 25 Users ( New Version ) | 2,199.00 |
| NetWare 4.1 50 Users ( New Version ) | 2,999.00 |
| NetWare 4.1 100 Users ( New Version ) | 4,269.00 |
| Novell Netware Manual Set | CALL !! |

## NOVELL File Server Install

*In-House Generate File Server*

*For Novell Netware 3.12 or 4.1*

$ 199 by Certified Novell Engineer

## NETWORK HUBS

### 3COM

| | |
|---|---|
| LinkBuilder TP/8 Port Hub | 249.00 |
| LinkBuilder TP/ 12 Port Hub | 379.00 |
| LinkBuilder 12 Port Hub (3C621) | 799.00 |
| LinkBuilder FMS II 12 Port | 649.00 |
| LinkBuilder FMS II 12 Port Mgmt | 995.00 |

### ADDTRON

| | |
|---|---|
| 4 Port Arcnet Passive Hub | 15.00 |
| 8 Port Arcnet Coax Active Hub | 125.00 |
| 8 Port Arcnet Twisted Pair Active Hub | 135.00 |
| 8 Port Ethernet 10 Base-T Hub | 149.00 |
| 16 Port Ethernet 10 Base-T Hub | 279.00 |

### ALLIED TELESIS

| | |
|---|---|
| 4 Port Ethernet 10 Base T Hub [MR410T] | 229.00 |
| 8 Port Ethernet 10 Base T Hub [MR810T] | 349.00 |
| 12 Port Ethernet 10 Base T Hub w/SNMP [3612TR] | 899.00 |

### ASANTE

| | |
|---|---|
| ASANTE Hub 8 TP Port Hub | 199.00 |
| ASANTE Hub 12 TP Port Hub | 399.00 |

### BOCA RESEARCH

| | |
|---|---|
| BOCA Hub 16 TP Port Hub | 299.00 |
| BOCA Hub 24 TP Port Hub | 829.00 |

### NOVELL EAGLE

| | |
|---|---|
| Eagle Hub 8 Port Hub [EH800] | 229.00 |
| Eagle Hub 12 Port Hub [EH1200] | 279.00 |

### HEWLETT PACKARD

| | |
|---|---|
| AdvancedStack 12 2600A | 769.00 |
| AdvancedStack 24 2601A | 1,195.00 |
| 8 Port EtherTwist | 359.00 |

### SMC

| | |
|---|---|
| 8 Port Elite 3608 Concentrator | 329.00 |
| 12 Port Elite 3512 Concentrator | 599.00 |
| 12 Port Elite 3612 TP Active Hub | 699.00 |
| TigerHub TP6 6RJ45/1AUI 6 Port Hub | 199.00 |
| TigerHub TP6B 6RJ45/1BNC 6 Port Hub | 239.00 |
| TigerHub CX3 3BNC/1AUI 3 Port Hub | 339.00 |
| TigerHub TP12 12RJ45/1AUI/1BNC | 399.00 |
| TigerHub CX6 6BNC/1AUI/1RJ45 | 659.00 |
| TigerHub FL6 6Dual Fiber/AUI/1BNC | 1,489.00 |

### SYNOPTICS

| | |
|---|---|
| 16 Port 2600 Hub(16 RJ45/ 1 AUI) | 839.00 |
| 16 Port 2604 Hub(16 RJ45/1 FOIRL) | 959.00 |
| 8 Port 800 Hub (Plug & Play/8 RJ45) | 319.00 |
| 8 Port 810M Mgm. Hub Plug & Play | 439.00 |

## NETWORK REPEATERS

### ADDTRON

| | |
|---|---|
| 2 Port Coax / Thick Repeater | 359.00 |
| 4 Port Coax / Thick Repeater | 499.00 |
| 5 Port ( 2 BNC/ 2 RJ-45 /1 AUI) Repeater | 749.00 |

### ALLIED TELESIS

| | |
|---|---|
| Fiber to BNC Repeater | 599.00 |
| 4 Port Coax Repeater( 4 BNC & 1 AUI) | 1299.00 |

### C-NET

| | |
|---|---|
| Repeater-2 BNC, 1 AUI | 449.00 |
| Repeater-2 BNC, AUI, & Fiber Optic | 719.00 |

## NETWORK ROUTERS

### 3COM

| | |
|---|---|
| NetBuilder Remote Office | 1,789.00 |

### DIGITAL EQUIPMENT CORP

| | |
|---|---|
| BRouter 90Ti Router | 2,499.00 |

### HEWLETT PACKARD

| | |
|---|---|
| Ethernet Router s/SNMP | 5,539.00 |

## NETWORK CD-ROM Server

*The Easiest Way to Network CD Roms*

DISCPORT for Ethernet Coax/10 TP $ 699.00

*For Novell Server 3.11 or Higher !*

## NOTEBOOK ETHERNETS

**(Notebook Parallel Port / PCMCIA)**

| | |
|---|---|
| 3Com Etherlink IIIB PCMCIA 10 TP | 199.00 |
| 3Com Etherlink IIIB PCMCIA Combo | 249.00 |
| Addtron Pocket Ethernet 10 TP | 149.00 |
| Addtron PCMCIA 10 TP & Coax | 199.00 |
| Novell Eagle PCMCIA Combo | 199.00 |
| GT Pocket Ethernet 10 TP & Coax Combo | 159.00 |
| SMC EtherNote Pocket 10 TP & Coax | 239.00 |
| SMC Elite PCMCIA 10 TP | 199.00 |
| SMC Elite 10 TP & Coax Combo | 249.00 |
| Xircom Pocket Ethernet 10 TP | 269.00 |
| Xircom Pocket Ethernet 10 TP & Coax | 319.00 |
| Xircom 10 TP | 239.00 |
| Xircom 10 TP & Coax Combo | 269.00 |

## FILE SERVER HARD DRIVE

### MICROPOLIS - FAST SCSI II

*( 1 inch FAST SCSI ) 5Yrs Manufacture Warranty)*

| | |
|---|---|
| 1.05 GB [4410] SCSI-II 8.5ms | 695.00 |
| 1.7 GB [2217] SCSI-II 10ms | 1059.00 |
| 2.0 GB [4221] FAST SCSI-II 9ms | 1,599.00 |
| 3.6 GB [1936] SCSI-II 11.5 ms | 1,999.00 |
| 4.29 GB [3243] FAST SCSI-II 9ms | 2,599.00 |
| 9.09 GB [1991] FAST SCSI-II | 5,999.00 |

### CONNER

| | |
|---|---|
| 1.06 GB [1060S] SCSI-II 10 ms | 599.00 |

### HEWLETT PACKARD

| | |
|---|---|
| 1.05 GB [C3323SE] SCSI-II 9.5ms | 699.00 |

## SCSI-II CONTROLLERS

### ADAPTEC

| | |
|---|---|
| AHA-1522AK Adapter w/ Kit | 139.00 |
| AHA-1542CFK Adapter w/ Kit | 299.00 |
| AHA-2842C VL-BUS Adapter w/ Kit | 259.00 |
| AHA-2742AT EISA Adapter w/ Kit | 399.00 |
| AHA-2940 PCI Adapter w/ Kit | 599.00 |
| External Mini SCSI Adapter for Parallel | 199.00 |
| External Slim SCSI Adapter for PCMCIA | 239.00 |

## NETWORK FAX SERVER

### CHEYNNE SOFTWARE

| | |
|---|---|
| FAXServer V2.0 NLM 10 User | 339.00 |
| FAXServer v2.0 NLM 25 Users | 469.00 |
| FAXServer v2.0 NLM 50 Users | 599.00 |

### INTEL

**Net SatisFAXtion**

*( The Best Communication product for LAN )*

| | |
|---|---|
| NetSatisFaxtion Fax Server V3.0 25 User | 789.00 |
| NetSatisFaxtion Fax Server V3.0 1000 User | 1,059.00 |
| SatisFaxtion 400 Int.14.4Kbps Fax Modem | 329.00 |

## REMOTE COMMUNICATION

### GATEWAY

| | |
|---|---|
| 4 Port LAN Expander | 1,295.00 |
| LAN Access Server, 4 MB | 1,459.00 |
| LAN Access Server, 8 MB | 1,619.00 |

### SHIVA

| | |
|---|---|
| LanRover 4/E-4 Lines(BNC/AUI/10 BT) | 2,569.00 |
| LanRover 4/T-Token Ring | 3,369.00 |
| LanRover 8/E-8 Lines(BNC/AUI/10 BT) | 3,669.00 |

### U.S. ROBOTICS

| | |
|---|---|
| Lan Modem 28.8 w/ Dial Routing | 1,599.00 |
| Communication Server 386 | 1,519.00 |

## DIGIBOARD

| | |
|---|---|
| 2 Port for Windows | 195.00 |
| PC/4E w/ Conn | 459.00 |
| PC/8E w/ Conn | 595.00 |
| PC/16EM System | 995.00 |
| EISA C/16 w/ Conn | 1,449.00 |
| ISA EPC/16 16 Port Multiport w/ Conn | 1,895.00 |

## NETWARE CONNECT

### NOVELL

| | |
|---|---|
| Novell Netware Connect 2 Port | 439.00 |
| Novell Netware Connect 8 Port | 1,595.00 |
| Novell Netware Connect 32 Port | 4,395.00 |

## NETWORK UPS SYSTEMS

### AMERICAN POWER CONVERSION

| | |
|---|---|
| Back UPS System 600 | 299.00 |
| Back UPS System 900 | 415.00 |
| Smart UPS System 600 | 409.00 |
| Power Chute Plus Software for NLM | 69.00 |

### TRIPP-LITE

| | |
|---|---|
| BC-600 UPS System Lan | 289.00 |
| BC-900 UPS System Lan | 389.00 |
| Omni 600 UPS System Lan | 359.00 |
| Power Alert Software for NLM | 65.00 |

## NETWORK CABLES/TOOLS

| | |
|---|---|
| **Cable** | |
| 25 Feet RG58A/U Coaxial Cable | 8.00 |
| 25 Feet RG62 Coaxial Cable | 12.00 |
| 25 Feet 10 Base-T Twisted Pair (Level 4) | 8.00 |
| **Connectors** | |
| 50 Ohm BNC Terminator (Thin Ethernet) | 2.00 |
| 93 Ohm BNC Terminator (Arcnet) | 2.00 |
| T-Connector | 2.00 |
| RJ-45 Connector | .50 |
| **Tools** | |
| BNC Crimping Tool | 25.00 |
| RJ-45 / RJ-11 Crimping Tool | 29.00 |
| RG-58 / 62 Wire Stripper | 25.00 |

## NETWORK PRINT SERVER

### NOVELL EAGLE

| | |
|---|---|
| Eagle NPE400 Ethernet Combo | 559.00 |

### HEWLETT PACKARD

| | |
|---|---|
| HP Jet Direct TP/BNC | 437.00 |

### INTEL

| | |
|---|---|
| Intel NetPort II Ethernet | 417.00 |
| Intel NetPort Express XL Ethernet Combo | 479.00 |

### XIRCOM

| | |
|---|---|
| Pocket Ethernet Print Server | 294.00 |
| Ethernet Print Server-1P BNC or RJ-45 | |

## NETWORK TRANCEIVERS

### ADDTRON

| | |
|---|---|
| Thick to Thin Tranceiver | 55.00 |
| Thick to 10 Base-T Tranceiver | 55.00 |
| Fiber Optic Mini Tranceiver | CALL !! |

### ALLIED TELESIS

| | |
|---|---|
| ENET Trans 1 BNC & 2 AUI [AT-257] | 329.00 |
| ENET Trans 4 AUI & 1 BNC | 359.00 |
| ENET Trans FIBER / AUI FOIRL | 219.00 |

### IMC NETWORKS

| | |
|---|---|
| IMC Networkds Lanceiver w/ Vampire | 115.00 |

### RACAL INTERLAN

| | |
|---|---|
| InterLan Piercing 1 Port Thick | 99.00 |
| InterLan Micromau AUI to RJ-45 | 49.00 |

### SONIC SYSTEMS

| | |
|---|---|
| Sonic Systems AUI to BNC & RJ-45 | 85.00 |
| Sonic Systems AUI -2x to RJ-45 | 105.00 |
| Sonic Systems AUI -2x to BNC | 105.00 |

## NETWARE RAIDION SYSTEMS

### MICROPOLIS

| | |
|---|---|
| Microdisk AV 1050 1.05GB External | 1,349.00 |
| Microdisk AV 1760 1.76GB Ext w/Software | 1,629.00 |
| Microdisk AV 3020 3.02GB External | 2,899.00 |
| Microdisk LS 2100 2.1GB Ext w/Software | 2,159.00 |
| Microdisk LS 3020 3.02GB External | 2,799.00 |
| Microdisk LT 1050 1.05GB External | 1,269.00 |
| Microdisk LT 1760 1.69GB External | 1,549.00 |
| Raidion 4200 3-2.1GB External SCSI-II | 6,799.00 |
| Raidion 6040 3-3.2GB External SCSI-II | 11,659.00 |

### CONNER CRS-RAID (Non-Array)

| | |
|---|---|
| RAID 4GB External SCSI-2 PCI | 6,699.00 |
| RAID 6GB External SCSI-2 PCI | 8,899.00 |
| RAID 8GB External Hardware PCI | 9,699.00 |
| RAID 12GB External Hardware PCI | 12,999.00 |
| RAID 4GB External SCSI-2 EISA | 6,799.00 |
| RAID 6GB External SCSI-2 EISA | 8,999.00 |
| RAID 6GB External Hardware EISA | 9,699.00 |

## NETWORK TAPE BACKUP

### CHEYENNE SOFTWARES

| | |
|---|---|
| ARC Serve / Solo 1 User | 149.00 |
| ARC Serve 5 Users | 259.00 |
| ARC Serve 10 Users | 439.00 |

### COLORADO MEMORY SYSTEMS

| | |
|---|---|
| 250 MB Internal Tape Backup Drive | 189.00 |
| 350MB Internal Tape Backup Drive | 189.00 |
| 700MB Internal Tape Backup Drive | 279.00 |
| Trakker 250MB External Drive | 299.00 |
| Trakker 350MB External Drive | 349.00 |
| Trakker 700MB External Drive | 439.00 |
| Powertape 2GB Internal Drive | 955.00 |
| Powertape 2GB External Drive | 1,279.00 |
| Powertape 4GB Internal Drive | 1,299.00 |
| Powertape 4GB External Drive | 1,599.00 |
| Powertape NLM 5 Use Software | 319.00 |
| Powertape NLM 20 Users Software | 669.00 |
| Power DAT 6000 4GB Internal Drive | 1,295.00 |
| Power DAT 6000 4GB External Drive | 1,595.00 |

### CONNER

| | |
|---|---|
| Python 2GB Internal DAT Drive Only | 699.00 |
| Python 2GB External DAT Drive Only | 1,099.00 |
| Python Turbo 4GB Internal DAT Only | 1,199.00 |
| Python Turbo 4GB External DAT Only | 1,199.00 |
| Tapestor DAT Internal 2GB & NLM | 1,161.00 |
| Tapestor DC6000, 1.3 GB Kit | 1,027.00 |
| Arcada BackUp Software for | |
| Arcada Backup Software for | |
| Arcada BackUp Software for | |

### EXABYTE

| | |
|---|---|
| FS1G 1.5GB Tape Internal | 795.00 |
| FS1G 1.5GB Tape External | 949.00 |
| 8200 5GB Internal | 1,995.00 |
| 8200 5GB External | 2,295.00 |
| 8500 10GB Internal | 2,795.00 |

# LOCAL / WIDE AREA BUSINES COMPLETE NETWORK SOLUTIONS

*We specialize in the following areas:*

1. *Complete Novell NetWare Installation*
2. *Network Cable Installation*
3. *On-Site Service & Training*
4. *Network Maintenance Contracts*
5. *Novell Certified Engineers On-Site*

## BSI FILE SERVERs

| | | |
|---|---|---|
| PENTIUM-100 | Mhz | $1,999.00 |
| PENTIUM-90 | Mhz | $1,799.00 |
| PENTIUM-66 | Mhz | $1,659.00 |
| 486DX2-66 | Mhz | $1,199.00 |

* Motherboard w/ 256K Cache
* 8MB of Memory, 70ns
* Monochrome Card
* 14" Monochrome File Server Monitor
* Super IDE & I/O Card (2S,1P,1G)
* 540MB IDE Hard Drive
* 1.44MB Teac Floppy Drive
* Mini-Tower File Server Case w/ UL Power Supply
* 101-Enhanced Keyboard

## BSI WORKSTATIONs

| | | |
|---|---|---|
| 486DX2-66 | Mhz | $799.00 |
| 486DX-33 | Mhz | $729.00 |
| 486SX-33 | Mhz | $695.00 |
| 386DX-40 | Mhz | $429.00 |

* Motherboard w/ CPU
* 4MB of Memory, 70ns
* Monochrome Card
* 14" Monochrome Monitor
* 101-Enhanced Keyboard
* Mini-Tower Workstation Case w/Power Supply
* 1.44MB Teac Floppy Drive
* Network Interface Card (Ethernet/Token Ring)

## BSI SUPER SYSTEMs

| | | | |
|---|---|---|---|
| PENTIUM-100 | PCI Mhz | $1,999.00 |
| PENTIUM-90 | PCI Mhz | $1,859.00 |
| PENTIUM-66 | PCI Mhz | $1,659.00 |
| 486DX2-66 | VLB Mhz | $1,199.00 |

* Motherboard w/ 256K Cache & CPU
* 4MB of Memory 70ns
* Super VGA Card w/ 1MB
* 14" Super VGA Monitor, .28mm
* Super I/O Card (2S,1P,1G)
* 540MB IDE Hard Drive
* 1.44MB Teac Floppy Drive
* Microsoft Compatible Mouse w/ Pad
* Mini-Tower Case w/ 200 Watts Power Supply
* 101-Enhanced Keyboard

## MULTI MEDIA CD SYSTEM

| | | |
|---|---|---|
| PENTIUM-100 | Multi-Media | $2,399.00 |
| PENTIUM-90 | Multi-Media | $2,259.00 |
| PENTIUM-66 | Multi-Media | $1,899.00 |
| 486DX2-66 | Multi-Media | $1,659.00 |

* Motherboard w/ 256K Cache w/ CPU & 4MB Ram
* Trident SVGA Graphic Card
* 14" Super VGA Monitor .28mm
* [illegible]
* [illegible]
* 540MB IDE Hard Drive
* 1.44MB Teac Floppy Drive
* Microsoft Compatible Mouse w/ Pad
* 101 Enhanced Keyboard
* Mini-Tower Case w/200 Watts Power Supply

## NETWORK YOURSELF

*Complete package to connect 2 computers*

Includes: 2 Network Operating Softwares
2 16-bit Ethernet Cards (PC-16C)
1 25 ft Coax Cable & 2 Terminators

| | |
|---|---|
| Lantastic 6.0 (Dos & Windows) | 99.00 |
| [illegible] | |
| Windows for Workgroup 3.11 Full Version | 368.00 |
| Window for Workgroup 3.11 Add-On | 99.00 |
| [illegible] | |
| Personal NetWare 1.0 (Dos & Windows) | 228.00 |
| NetWare Lite 1.1 | 109.00 |

*All prices are subject to Change without prior notice

**!!! Government, School & Corporate P.O.s are WELCOME !!!**

# MAX IT OUT, W

## Multimedia Desktop

PC Computing

**4-Star Quality Award!**
National PC manufacturer comparison, July '94

MultiMedia 95

### MULTIMEDIA 95

- 16 MB RAM, 256K Write Back Cache
- 850 MB 10ms Enhanced IDE Hard Drive
- PCI Enhanced IDE Hard Drive Controller
- Diamond Stealth 64 with 2MB PCI Accelerator, (Top Performer in DOS & Windows)
- 15" Flatscreen, .28mm Color Monitor (30% Larger Edge-to-Edge)
- 4X Quadra Speed CD-ROM Drive, 600KB/Sec
- SoundBlaster 16-bit "true-sound" Sound Card
- 2 Amplified Speakers & Choice of CD Bundles
- 1.44 MB, 3.5", Floppy Disk Drive
  Enhanced 101-key Keyboard
  High Resolution Serial Mouse
  2 Serial, 1 Parallel & 1 Game Ports!

486DX2/66 .....$1795
486DX4/100 .....$1925
Pentium™/75 .....$2195
Pentium™/90 .....$2395
Pentium™/100 .....$2595

OPTIONAL TOWER CASE & 21" MONITOR ON ALL SYSTEMS

Maximus' PCs demonstrate our top-quality engineering & competitive, cost-effective pricing. Each of these systems is backed by our industry-leading General Electric optional 4-year extended on-site service warranty-as well as our Maximus' Lifetime Free Labor and First-12 month's Express Parts Replacement Warranty, with Lifetime Tech-Support for as long as you own your system!

### PCI LOCAL BUS & FAST HARD DRIVES

Our systems bring together superfast, efficient 64-bit PCI video accelerator and "Enhanced" Type-3 IDE or Fast SCSI-2 hard dries to enable you to win today's productivity battles-without breaking your budget!

### PERSONAL TOUCH SERVICE

Come in and feel free to ask one of our highly-trained sales technicians to help you design a system that will suit your own specific needs. Tell them what applications you generally use, the operating environment, network requirements and they will help you design your own customer configuration. There's no extra charge-it's all part of our Maximized Personal Service!

### WIDE SCSI STATION

- 16 MB RAM, 256KB Write Back Cache
- Fast 1,060 MB 9ms Wide SCSI-2 Hard Drive
- PCI Fast & Wide SCSI-2 Hard Drive Controller
- Diamond Stealth 64, 2MB, PCI Graphics Accelerator, 42+ WinMarks!
- 15" Flatscreen, .28mm, Color Monitor (30% Larger Edge-to-Edge)
- Enhanced 101-key Keyboard
- 7-Drive Bay Vertical Case with 230W P.S.
- 4X Quadra Speed SCSI-2 CD ROM
- 1.44 MB, 3.5", Floppy Disk Drive
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel & 1 Game Ports

486DX4/100 .....$2395
Pentium/75 .....$2665
Pentium/90 .....$2965
Pentium/100 .....$3015

### PCI GRAPHICS MEDIA

- 16 MB RAM, 256K Write Back Cache
- 850 MB 10ms Enhanced IDE Hard Drive
- PCI Enhanced IDE Hard Drive Controller
- ATI MACH 64 with 2MB PCI Accelerator, (PC Magazine Editor's Choice)
- 17" Digital Flatscreen Low Radiation Color Monitor
- 4X Quadra Speed CD-ROM Drive, 600KB/Sec
- SoundBlaster 16-bit "true sound" Sound Card
- 2 Amplified Speakers & Choice of CD Bundles
- 1.44 MB, 3.5", Floppy Disk Drive
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel & 1 Game Ports

486DX4/100 .....$2225
Pentium/75 .....$2495
Pentium/90 .....$2695
Pentium/100 .....$2895

### ALL MAXIMUS SYSTEMS COME WITH MAXI-ADVANTAGE

3 YEAR WARRANTY PARTS & LABOR

EXPRESS PARTS REPLACEMENT

4 Year G.E. On-Site Service Warranty optional

### MAXIMUS ANY-SYSTEM UPGRADES

- Double-spin IDE CD-ROM .....$ 139
- 4X Quadra-spin SCSI-2 CD-ROM .....$ 299
- Orchid Soundwave32 DSP sound card $ 189
- SoundBlaster 16-bit sound card .....$ 99
- 14.4K Send-Receive fax modem .....$ 69
- 28.8/14.4 Send-Receive fax modem ....$ 139
- PCI Ethernet card .....$ 139
- 420 MB Internal tape backup ....$ 199
- 2 GB SCSI tape backup .....$ 779

PRICES SUBJECT TO CHANGE WITHOUT NOTICE. INTEL, INTEL INSIDE AND PENTIUM PROCESSOR ARE REGISTERED TRADEMARKS OF INTEL CORPORATION. ALL OTHER LOGOS AND TRADEMARKS ARE THE PROPERTY OF THEIR RESPECTIVE COMPANIES. 486 SYSTEM CONFIGURATIONS FOR PCI INCLUDE 3 PCI SLOTS. PENTIUM CONFIGURATIONS INCLUDE 4 PCI SLOTS. * ALL PHOTOGRAPHS ARE FOR ILLUSTRATION PURPOSES ONLY AND MAY NOT A TRUE REPRESENTATION OF ACTUAL PRODUCTS. NOT RESPONSIBLE FOR ERRORS IN TYPESETTING. ©1994 MAXIMUS COMPUTERS.

# TH MULTIMEDIA

## System For Only $1,345

*Performance*

### PCI/VLB BEST BUY

- 14.4KB S/R Fax Modem with Software
- 8 MB RAM, 256K Write Back Cache
- 520 MB 11ms Enhanced IDE Hard Drive
- PCI/VLB Enhanced IDE Hard Drive Controller
- Fast PCI/VLB Graphics Accelerator, 1MB Up To 38+ WinMarks!
- 15" Flatscreen, .28mm Color Monitor (30% Larger Edge-to-Edge)
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 1.44 MB, 3.5", Floppy Disk Drive
- 2 Serial, 1 Parallel & 1 Game Ports

486DX4/66VLB .....$1245
486DX2/100PCI ....$1445
Pentium/75PCI .....$1625
Pentium/100PCI ....$2025

MULTIMEDIA PRO WITH OPTIONAL TOWER CASE & 17" MONITOR

*MultiMedia*

### MULTIMEDIA PRO

- 8 MB RAM, 256K Write Back Cache
- 520 MB 11ms Enhanced IDE Hard Drive
- PCI Enhanced IDE Hard Drive Controller
- Vision PRO 64, 1MB, PCI Graphics Accelerator, Ultrafast - up to 38+ WinMarks!
- 15" Flatscreen, .28mm Color Monitor (30% Larger Edge-to-Edge)
- 4X Quadra Speed CD-ROM Drive, 600KB/Sec
- SoundBlaster 16-bit Stereo Sound Card
- 2 Amplified Speakers & Choice of CD Bundles
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel & 1 Game Ports
- 1.44 MB, 3.5", Floppy Disk Drive

486DX4/100 .....$1695
Pentium/75 .....$1875
Pentium/90 .....$2175
Pentium/100 .....$2325

### PCI/VLB OFFICE PRO

- Double Speed 2X CD-ROM Drive
- 14.4KB S/R Fax Modem with Software
- 8 MB RAM, 256KBWrite Back Cache
- 520 MB 11ms Enhanced IDE Hard Drive
- PCI or VL-Bus Enhanced IDE Hard Drive Controller
- Fast PCI 64 or VL- Bus 1MB Graphics Accelerator
- 15" Flatscreen, .28mm Color Monitor (30% Larger Edge-to-Edge)
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel, 1 Game Ports
- 1.44 MB, 3.5", Floppy Disk Drive

486DX2/66VLB .....$1395
486DX4/100VLB ...$1595
Pentium/75PCI .....$1775
Pentium/90PCI .....$2175

PCI/VLB OFFICE WITH OPTIONAL SPEAKERS

### HOME MULTIMEDIA

8 MB RAM, 256K Write Back Cache
- 420 MB 11ms Enhanced IDE Hard Drive
- PCI or VL-Bus Enhanced IDE Hard Drive Controller
- Fast PCI 64 or VL-Bus 1MB Graphics Accelerator
- 14" SVGA, .28mm, Non-Interlaced Color Monitor
- 14.4KB S/R Fax Modem with Software
- Double Speed CD-ROM Drive
- 16-bit Stereo Sound Card
- 2 Amplified Speakers & Choice of CD Bundles
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel & 1 Game Ports
- 1.44 MB, 3.5", Floppy Disk Drive

486DX2/66VLB .....$1345
486DX2/80PCI .....$1445
486DX4/100PCI ....$1545
Pentium/75PCI .....$1725

### SUPERNOTE

- Travelers' Multimedia Notebook Performer
8 MB RAM,& 340 MB, 2.5", Hard Disk Drive
- 32-bit Local Bus IDE Hard Drive Controller
- 32-bit VL-Bus Graphics Accelerator, 1 MB, Supports External Monitor up to 1280x1024
- Large 10.3" Dual Scan & 9.4" Active Matrix/Monochrome Display
- Built-in Sound Card, Microphone & Speaker
- 86-key Keyboard with Numeric Keypad
- Built-in Large 19mm Trackball
- 1.44 MB Micro Floppy Disk Drive
- Two Type II or One Type III PCMCIA Slot
- 16550 UART Serial & Parallel Ports
- Up to 2.5 Hours Battery Life & 6.5 Lbs
- Carrying Case & AC Adapter Included

486DX2/66MONO .....$1695
486DX4/75DUAL SCAN ...$2095
486DX4/100DUAL SCAN ...$2195

DUAL SCAN TO ACTIVE MATRIX ADD $850

MEDIANOTE WITH BUILT-IN CD ROM.
PLEASE CALL FOR UPGRADE OPTIONS; 8MB,16MB,32MB PCMCIA CARDS & MORE

### MEDIANOTE

- Full Multimedia Performance with Built-in Double Speed CD-ROM Drive
- 8 MB RAM & 340 MB, 2.5", Hard Disk Drive
- Local Bus IDE Hard Drive Controller
- 32-bit VL-Bus Graphics Accelerator, 1 MB, Supports External Monitor up to 1280x1024
- Large 9.4 " Dual Scan ColorDisplay
- Built-in 16-bit Sound Card, Microphone & Dual Stereo Speakers
- 85-key Keyboard with Numeric Keypad
- Built-in Mini Joystick
- 1.44 MB Micro Floppy Disk Drive
- Two Type II or One Type III PCMCIA Slot
- Enhanced Serial & Parallel Ports
- Up to 3 Hours Battery & 7.2 Lbs Travel Weight
- 14.4KB PCMCIA Fax Modem with Software

486DX2/66.....$2495
486DX4/75.....$2595
486DX4/100 ...$2695

DUAL SCAN TO ACTIVE MATRIX ADD $975

*Corporate & Schools PO's, Government Purchase Orders & CODs accepted. (oac) *All prices are based on check & cash only.*

CALL 818.305.5925 IN MONROVIA
818.549.1188 IN GLENDALE

MAXIMUS
"Performance to the Max"

**MAXIMUS COMPUTERS INC.**

**MONROVIA**
HOURS: MON-FRI 9-6 SAT 10-5
710 E. CYPRESS AVE
MONROVIA, CA 91016
TEL: 818.305.5925
FAX: 818.357.9140

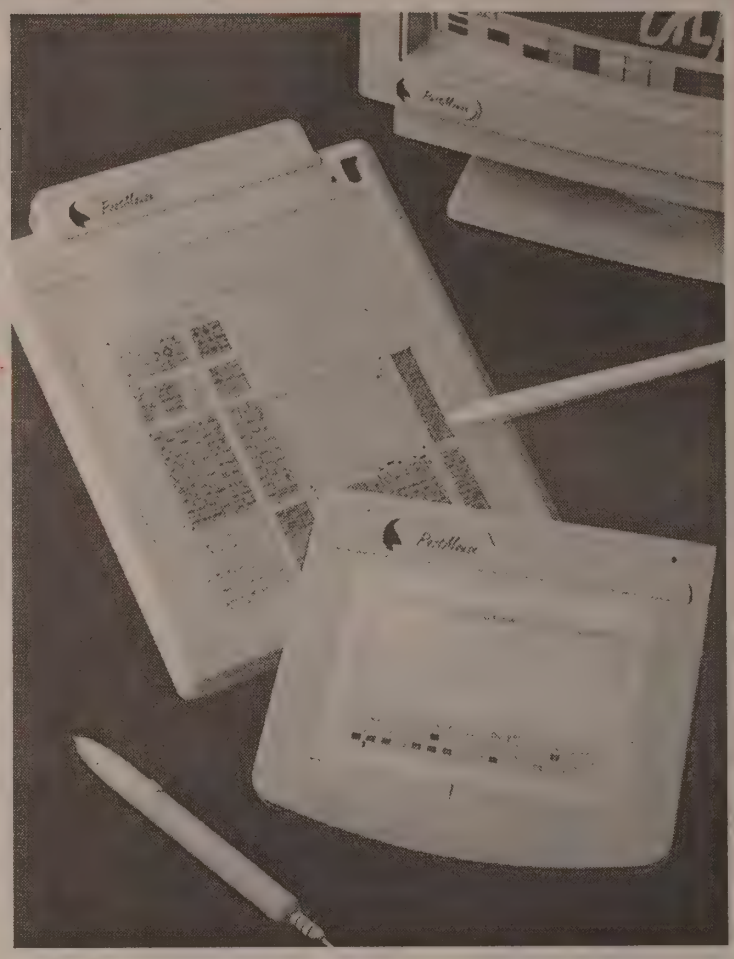
**GLENDALE**
HOURS: MON-FRI 9-6 SAT 10-5
224 W. COLORADO BL.
GLENDALE, CA 91204
TEL: 818.549.1188
FAX: 818.549.1077

*We accepte most major credit cards and C.O.D.'s*
VISA DISCOVER

*Introducing:* **The next generation mouse**

When you are asked to: *Sign it* and *Fax it* back!
: *Take phone messages* while you are busily typing.
: *Keep notes* that needs sketching other then typing.
: *Draw* and *Design* to your computers.

Dealer / VAR Welcome!



**We have Solutions!**

- Our bundled software provides versatile & easy solutions.
- Simply connects PostMouse to your serial port, then you have a mouse and a pen.
- No more double-click nightmare to launch a task.
- Utility is provided to customized your own templates.
- Autocad template, Microsoft Mouse & SummaGraphic emulation.

Available Sizes: 3 x 4.5", 6 x 6" *(Under $100)*
Also CAD / CAM & Design Digitizers: 12 x 12", 12 x 18" *(Very affordable)*

**Darwin Computer Corp.**
Tel. **714-890-4074**
Fax 714-890-0884

**PC Unlimited**
Tel. **714-532-3136**

VCP PRINTING (714) 894-8318 • Fax 894-4108



**Given the very large cost difference between commercial and shareware products, you may decide it's worth buying shareware for some of your systems, and commercial software for others.**

PC/Windows cousin, there is no definitive online collection of Macintosh TCP/IP shareware. Adam Engst's book has some of the shareware I mention here, and that's a good place to start, another good place to look is Walnut Creek CDROM's new Ultra Mac Utilities Shareware CD-ROM, which is due this month.

That about wraps this month's installment on how to connect to the Internet. Next month I'll look at some of the more popular Internet "server" applications and introduce you to some of the hazards of Internet connectivity and how to protect yourself. ■

Copyright © 1995 by Peter John Harrison. All rights reserved.

## RESOURCES:

**NetManage**
(408)973-7171

**Intercon Systems Corp.**
1-800-INTRCON

**Walnut Creek CDROM**
(510)674-0783

**FTP Access to the CICA Collection of Windows TCP/IP shareware:**
*ftp://ftp.cdrom.com/.5/cica/winsock/*

*The Internet Direct Connect Kit*
By Peter John Harrison
IDG Books

*The Internet Starter Kit for Macintosh*
By Adam Engst
Hayden Books

interact! A CD-ROM STORE

**We Buy & Sell Used CD-ROM Software**

**Hundreds and Hundreds of New & Used CD-ROM Titles in Stock for IBM and Mac**

We Carry a Wide Variety of Adult CD-ROMs
The Interact! promise: We absolutely guarantee that you will find *the largest selection* of CD ROM titles anywhere in Los Angeles!

☞ *We are located in Old Town Pasadena 2 Blocks North of Colorado at Fair Oaks*
*2 East Holly Street*

☎ 818-578-7282
*OPEN 7 DAYS A WEEK*
*MON-SAT 10am - 7pm • SUN 11am - 6pm*

# INNOVATION IN PCMCIA MODEM CARD

**Our PCMCIA Card is your dreams come true!**

Model 1414R/BA $299
High speed Audio Data/Fax/Voice PCMCIA Modem Card

- Supports business audio
- Enables voice/audio application (including voice recording & playback, telephone answering, voice mail, voice annotation on documents, spread sheets & fast multimedia presentation, call processing and interactive voice response.
- Full send and receive fax and data (14.4k bps, supports fax-forward, fax-back and fax-on-demand)
- Works with notebook, sub-note book, palmtop, pen-based computer, PDA and other with PCMCIA 2X compatible type II slot.

Model 2814R $299
Ultra High Speed Data/Fax PCMCIA Modem Card with internal DAA

- Operates at line speeds up to 28,800 bps(V34)
- Error correction(V.42/MNP2-4) & data compression(V.42bis/MNP5), data throughout up to 115.2K bps

Options: Cellular activatable- add $50
Cellular kit- add $79

Ask for our BEST SELLING 14.4K data/fax/voice/cellular PCMCIA modem card!

Resellers inquiry welcome

Distributed by **California LS Inc.**

48890 Milmont Drive, 106D
Fremont, CA 94538

Phone: 510-656-9885/415-241-9185
Fax: 510-440-9566



# CNE & ECNE Training Products

*Powerful Windows based training products at affordable prices! Practice commands & utilities on simulations built in to our Computer Based Training programs.* ***Multi-user licences*** *for LANs are also available.*

## CBT's ( incl. books )

| | |
|---|---|
| DOS & Micro. Concepts | $ 129.00 |
| Administration v3.1x | $ 229.00 |
| Adv. Administration v3.1x | $ 229.00 |
| System Manager v2.2 | $ 229.00 |
| TCP/IP Transport | $ 229.00 |
| Service & Support (# 801) | $ 249.00 |
| 3.1x Install & Config. (# 802) | $ 229.00 |

## Books

| | |
|---|---|
| DOS & Micro. Concepts | $ 29.00 |
| Administration v3.1x | $ 59.00 |
| Adv. Administration v3.1x | $ 59.00 |
| System Manager v2.2 | $ 59.00 |
| TCP/IP Transport | $ 59.00 |
| Service & Support (# 801) | $ 79.00 |
| 3.1x Install & Config. (# 802) | $ 79.00 |
| Networking Technologies | $ 89.00 |
| Net. v3.1x to v4.x Update | $ 79.00 |

## Proficiency Tests

| | |
|---|---|
| DOS & Micro. Concepts | $ 19.95 |
| Administration v3.1x | $ 19.95 |
| Adv. Administration v3.1x | $ 19.95 |
| System Manager v2.2 | $ 19.95 |
| TCP/IP Transport | $ 19.95 |
| Service & Support (# 801) | $ 29.95 |
| 3.1x Install & Config.(# 802) | $ 19.95 |
| Net. v3.1x to v4.x Update | $ 19.95 |
| System Admin. v4.0 | $ 19.95 |
| Ad. Administration v4.0 | $ 19.95 |
| Networking Technologies | $ 19.95 |
| 4.0 Installation workshop | $ 19.95 |
| Printing with NetWare | $ 19.95 |
| NetWare Global MHS | $ 19.95 |
| Unix OS Fundamentals | $ 19.95 |
| Fundamentals of Inter-networking & Mgmt. design | $ 19.95 |

LANTEC

***!! Call or fax for a free CBT demonstration disk !!***

*2285 ST. LAURENT BLVD., D-12, OTTAWA, ON., K1G 4Z7*
*Tel: (613) 736 - 5326 Fax: (613) 736 - 9614*
*All prices are subject to change without notice.*



# NETWORK CLASSES

Want a Career Boost? Be a Network Pro !

**H.J. Technology**
141 E. Duarte Rd.
Arcadia, CA 91006
**818-447-9959**
Fax: 818-447-9882

**NOVELL CERTIFICATION CLASSES**
**CNE/CNA Certifications**

- Small Class with Experienced Netware Instructors
- Novell's Books/Material & NUI Videos
- Hand-on Lab, One Computer/Student
- Money Back Satisfaction Guaranty
- Day and Weekend Classes; Payment Plan Available

Call **1-800-6-NETWRK**

Why Pay More When You Can Get the Same Quality Training Here?!



# INTERNET PUBLISHING

**Establish a Presence on the Net**
- Web Server Rentals
- Custom Web Page Design
- Discount for non-profit Organizations

**Explore the Net**
- World Wide Communications
- Shell Accounts: Flat $14/month
  Easy to use menu with Email, Usenet News, FTP, Telnet, Gopher, IRChat, Lynx etc.
- SLIP / PPP: $30 for 60 hours/month
- ISDN, 56K, T-1 dedicated access

**email**: info@cinenet.net
http://www.cinenet.net

Fax: 310-394-1847
Data: 310-301-4501

To register, dial
310-301-4501
login as "guest"

**Cine•Net•Communications•Inc.**
Voice 310•301•4500



use with or without keyboard

# POCKET SIZE 486

Available with:
Ethernet
Coprocessor
Additional RAM

**486 / 25mhz**
**4Mb Ram**
**40/80 Mb Hard Disk**
**96/24 Fax Modem**
**Cordless Mouse/Pen**
keyboard & ext kb port
parallel & serial ports
external VGA port
3.5" floppy drive
AC Adapter & charger
battery
carrying case
1 yr warranty

only 2.2 lbs

perfect for students

(–use pen &/or keyboard–, recognizes your writing!

FROM $499 LAST WEEKS

made by IBM USA

ACCESSORIES AVAILABLE

call (800)359-DEAL
B-WARE
11684 Ventura Blvd. #497
Studio City, CA. 91604

**SMALL OFFICE, HOME OFFICE** • BY BIRRELL WALSH

# Keeping Track In The Two-Platform Office

## Getting Organized With Mac And Windows

**In this month's** column we have four items. First, we must tell how a Macintosh came into an all-Windows house and this column became "bi-platformic."

Then, since we who have home offices desperately need to keep track of our own work, as no one else is supervising us, we'll look at two software packages for Keeping It All In Order. And we end with a quick glance at a book that will let you get some real use from the Internet.

### How Your Correspondent Became Bi-Platformic

Some years ago I made the choice to concentrate on Windows products. I thought the Macintosh was, if not dead, at least badly wounded. This was conventional wisdom at the time among many people working in the business world.

The recent Macworld Expo in San Francisco has changed my mind. There I found both halls of the Moscone Center packed with what I can only call happy fans. Exhibits were jammed into every corner. Very large software companies—including Microsoft—had made very large investments in this show. Every application family was there: business, artistic, scientific, entertainment, and the downright odd.

The clincher for me, though, was the elan and vitality of the crowds. In a day when PC shows tend to be ho-hum-yawn affairs, this was a lively and interested group. The show felt like the Computer Faires of the early '80s. I heard French, German, Japanese, and languages I could not identify from Central Europe. The shoppers were young, middle-aged, and old.

The Macintosh platform had just received three revivifying windfalls. The consortium of Apple, Motorola, and IBM that seemed so improbable a few years ago had delivered the Power PC hardware. Intel had just shot itself in the foot with a botched chip and a botched cleanup; current, cruel Internet humor refers to their replacement chip as the "Repentium." Microsoft seems unable to get Windows 95 to market. All these things were good news for the Macintosh, and Macintosh developers were clearly exploiting their opportunity.

So I thought it wise to obtain a Macintosh. Apple provided one on loan. You are not even to think that this will influence me unduly. Shame on you. The SOHO column is henceforth bi-platformic.

### Keeping Track Of It All

Last month we talked about organizing your space to make work possible. This month we look at other kinds of organization you need when you work alone.

In a small office, you may have no boss and no support staff. Bosses can be useful, as they set tasks and monitor results. But what do you do if you are your own boss? Who will nag you when you need nagging? And if you have no clerical help, who will file all those notes and maintain a Rolodex for you?

Both of these tasks can be delegated to your computer.

### First Things First—Mac

Jerome Neuman is an independent radio producer. He has been making *Check It Out*, an internationally distributed radio short about libraries, for several years. He does all his research and writing from his home office in Oakland.

Neuman swears by First Things First. He has used its simpler version to keep track of all his to-do's and appointments. He likes the simplicity of the interface: "First Things First does everything I need from a to-do/reminder list," he says. "It's easy to use, flexible, and in-your-face with its insistence that you do things when you intended to do them."

FTF gets its simplicity from being a single-purpose application. It is not a personal information manager that tries to keep track of every person you know; it's for time management only.

First Things First Proactive, a new and extended version that requires System 7 or greater, comes with a booklet on organizing your time. It draws on the wisdom of time management consultant Alan Lakein to help you to plan your future—and then to carry out that plan by doing priority items first. This is not a casual admonition. The booklet guides you through the process of evaluating your life and your long-term goals.

By setting up long-term goals, you can evaluate what you do against them. Does this task seem quite so urgent when you realize it has nothing whatsoever to do with your lifetime objectives? And that job you've been neglecting because everything else has been so pressing—perhaps it is more important than you thought, because it does contribute to your purpose. You do not have to do this soul-searching to use FTFP. But if you do take the time, you find that you can use the program's priority-assigner much more effectively.

The same planning booklet will help you learn how to break major projects down into smaller, manageable steps.

**By setting up long-term goals, you can evaluate what you do against them. Does this task seem quite so urgent when you realize it has nothing whatsoever to do with your lifetime objectives?**

# M.I.G.
## COMPUTER SYSTEMS

## M.I.G. P5 PCI SYSTEM

**P5 90MHz $1925** **P5 66MHz $1725** **P5 60MHz $1625**

- Intel PCI Bus Motherboard
- 15" 1280 x 1024 .28 N.I. SVGA Monitor
- 8MB RAM 70ns
- 1.44 Floppy Drive
- 540MB Enhanced IDE HDD
- PCI Enhanced IDE HDD Controller
- PCI VGA Card w/2MB
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- MIDI Tower Case w/250 Watt

| | |
|---|---|
| Upgrade 4MB to8MB | $149 |
| Upgrade 8MB to 16MB | $289 |
| Upgrade14" SVGA to 15" SVGA | $95 |
| Upgrade 14" SVGA to 17" SVGA | $380 |
| Install 14.400 Fax/Modem | $69 |

## M.I.G. 486 VL-BUS SYSTEM

**Intel 486DX2-66MHz $895** **Intel 486DX-33MHz $810**

- 486DX2-66MHz VLB w/256K Cache
- 4MB RAM 70ns
- 1.44 Floppy Drive
- 420MB IDE HDD
- Windows Accelerator VLB w/1MB Exp. to 2MB
- 14" 1024 x 768 .28 Super VGA Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Keyboard
- Hi-Resolution Mouse
- Mini Tower Case w/230 Watt

### M.I.G. NOTEBOOK SERIES

**Novacomm 400 SERIES 486SLC2/50MHz**

| | |
|---|---|
| • 4MB RAM • 120MB Hard Drive • 9.5" Backlit | $950 |
| **Upgrade to 200MB Hard Drive** | $1050 |
| **486DX/33MHz** • 4MB RAM • 200MB Hard Drive • Mono VGA | $1250 |
| Upgrade to 340MB Hard Drive | 1355 |
| Upgrade to 486DX2/66 MHz | 1425 |
| Upgrade to Dual Scan Color | 1899 |

ACTIVE MATRIX AVAILABLE!

## MISCELLANEOUS

### Motherboards

| | |
|---|---|
| 386SX-40MHz w/CPU | $59 |
| 386DX-40MHz w/CPU w/128K Cache | 89 |
| 486SX-33MHz w/CPU w/256K Cache | 169 |
| 486DX-40MHz w/AMD w/256K Cache | 245 |
| 486DX2-66MHz w/AMD w/256K Cache | 289 |
| 486DX2-66MHz w/Intel w/256K Cache | 289 |
| P5 60MHz VLB w/256K Cache (No CPU) | 189 |
| P5 66MHz VLB w/256K Cache (No CPU) | 199 |
| P5 90MHz PCI + VLB OPTI (No CPU) | 209 |
| P5 90MHz INTEL | 319 |

Please Call For Pricing On AMI, ASUS, INTEL, MICRONICS, OPTI AND VEGA Motherboards

### Video Cards

| | |
|---|---|
| CIR 5428 VLB | $68 |
| Diamond Stealth 64 VLB w/2MB | 179 |
| Diamond Stealth 64 PCI w/2MB | 179 |
| ATi Mach 64 VLB w/2MB D | 178 |
| ATi Mach 64 PCI w/2MB D | 189 |
| Trident 8900 w/1MB | 51 |
| Trident 9000 w/512K Cache | 33 |
| Trident 9400 VLB | 60 |
| S-3 VLB 1MB | 65 |

Please Call For Pricing On All DIAMOND & ATi Models

### Tape Back-Ups

| | |
|---|---|
| Colorado DJ-20 | $145 |
| Colorado DJ-30 | 169 |
| Colorado TJ-20 | 289 |
| Conner 250MB Internal | 137 |
| Conner 250MB External | 259 |
| Conner 420MB Internal | 175 |
| 3MDC 2120 Tape Cartridge | 14.95 |

Please Call For Pricing On DEC, EMERALD Systems, EXABYTE, HEWLETT PACKARD, IOMEGA, MOUNTAIN, SUMMIT, TECMAR, WANGTEK & WANG DAT Tape Back-Up Systems

### CPU & Memory

CALL FOR PRICING

### Monitors

| | |
|---|---|
| Arcus 14" Mono | $80 |
| Arcus 14" Mono SVGA | 98 |
| Maxview 14" SVGA Non-Interlaced | 199 |
| Hi-Com 14" SVGA Non-Interlaced | 205 |
| Link 15" SVGA Non-Interlaced | 310 |
| CTX 1451 | 219 |
| CTX 1451 GM-LR | 249 |
| CTX 1562 GM | 295 |
| CTX 1760 DF | 549 |
| CTX 1765 GM | 579 |
| ACER 761 17" | 569 |
| Viewsonic V15 | 395 |
| Viewsonic V15E | 319 |
| Viewsonic 17 | 799 |
| Viewsonic V17G | 689 |
| Viewsonic V20 | 1349 |
| Viewsonic V21 | 1589 |
| MAG DX-15 | 330 |
| MAG DX-17 | 595 |

Please Call For Pricing On ACER, MAG NEC & OPTIQUEST Monitors

### Fax Modems

| | |
|---|---|
| Zoltrix 14.4 Internal | $64 |
| US Robotics 14.4 Internal | 98 |
| US Robotics 14.4 External | 115 |
| US Robotics 28.8 Internal | 209 |
| US Robotics 28.8 External | 234 |

Please Call For Pricing on HAYES, SUPRA & ZOOM Fax modems

### FDD Drives

| | |
|---|---|
| NEC 1.2MB | $43 |
| NEC 1.44MB | 32 |
| TEAC 1.2MB | 45 |
| TEAC 1.44MB | 35 |
| TEAC Dual FD | 89 |

### HDD Drives

| | |
|---|---|
| Conner 210MB | $165 |
| Conner 420MB IDE | 179 |
| Conner 540MB IDE | 209 |
| Samsung 420MB IDE | 174 |
| Samsung 560MB IDE | 199 |
| Western Digital 730MB IDE | 279 |
| Conner 850MB IDE | 299 |
| Conner 1.2GB IDE | 449 |
| Seagate 1.08GB IDE | 444 |
| Seagate 2.0GB SCSI | 995 |
| Quantum 2.1GB SCSI | 929 |

Please Call For Pricing on DIGITAL (DEC), HEWLETT PACKARD, MICROPOLIS, MINI-STOR, SEAGATE STORAGE D & QUANTUM HARD DRIVES

### CD ROM

| | |
|---|---|
| Mitsumi 001 (2x) Dual Spin | $119 |
| NEC 510 SCSI (3x) Triple Spin | 259 |
| NEC 4xi (4x) Quad Spin | 459 |
| Panasonic 563 Dual Spin | 117 |
| Toshiba 3501 SCSI Quad Spin | 289 |
| 4 Plextor SCSI II Quad Spin | 425 |
| TEAC Quad Spin | 245 |
| 14 CD Titles | 39 |
| **Creative Lab Discovery CD 16 Kit** | 249 |

Please Call For Pricing on new 4x CD ROM's

### Keyboards

| | |
|---|---|
| Focus 2001 | $32 |
| Focus 6000 | 21 |
| Focus 9000 | 48 |
| Fujitsu 4700 | 38 |
| Syncan 101 | 16 |
| Honeywell 101 (3yr. Warranty) | 33 |
| Keytronics KT2000 101 | 28 |

### Control Cards

| | |
|---|---|
| Super IDE I/O | $13 |
| Super IDE I/O VLB | 19 |
| Hi-Serial I/O VLB w/IDE | 49 |
| PCI IDE | 29 |
| PCI SCSI II | 69 |

Please Call For Pricing on ADAPTEC Control Cards - all models

### Sound Card

| | |
|---|---|
| Blaster 16 Value | $87 |
| Blaster 16 MCD OEM | 79 |
| Blaster 16 MCD | 129 |
| Blaster 16 MCD ASP | 167 |
| Blaster SCSI OEM | 99 |
| Blaster 16 SCSI | 149 |
| Blaster 16 SCSI/ASP | 199 |
| Media Magic | 69 |

Please Call For Pricing On ATi, AZTECH LABS, CARDINAL, DIAMOND, LOGITECH, ROLAND, SIGMA DESIGNS & TURTLE BEACH SOUND PRODUCTS

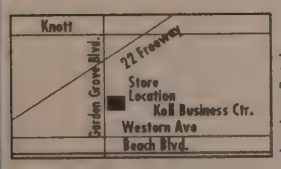
### Printers

| | |
|---|---|
| HP 540 | $279 |
| HP 560C | 449 |
| HP 4L | 519 |
| Epson Stylus Color | 499 |

Please Call For Pricing On All EPSON, OKIDATA, CANON & PANASONIC Printers

### Mouse

| | |
|---|---|
| Z-Nix Mouse | $8 |
| Microsoft Mouse | 29 |




## O.C. OFFICE

7201 Garden Grove Blvd., Suite B, Garden Grove, CA 92644

**TEL: 714-379-6880**

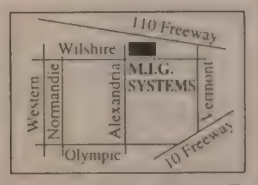
**FAX: 714-379-6887**

## L.A. OFFICE

3377 Wilshire Blvd., Suite 103, Los Angeles, CA 90010

**TEL: 213-427-1880**

**FAX: 213-427-1885**




VISA

MasterCard

**HOURS:** Monday thru Friday 9:00 a.m. to 7:00 p.m.
Saturday 10:00 a.m. to 4:00 p.m.

All Accessories Also Available. We Deliver w/in a 25 Mile Radius When Purchasing a System!
We Honor Government, Corporate & School PO's!

Not responsible for typographical errors. Prices subject to change w/out notice. All prices based on cash discount. 2% charge for credit card use.

NOVELL

FTFP has an outline window to make an overview of what you need to do. After you have listed all the tasks and subtasks, you can open up a calendar window, and drag and drop the tasks into the appropriate days of the calendar.

Calendar and to-do lists are schedulable in various ways. You can arrange for reminders of each item at any advance interval you wish. You can make items recurring (daily, weekly, monthly), and you can schedule concurrent events.

FTFP can organize master schedules from subordinate schedules. It can be used on a network (a feature we cannot test, as our office is too small for a network), allowing an office-wide calendar to be made out of the calendars of group members. The product does exactly what it claims to do: it helps you to plan and manage your time. The price is excellent, and those who prefer directness will like FTFP's orderly approach.

## InfoSelect—Windows

The Windows world is full of Personal Information Managers.

Having reviewed a number of them, I found that they all were too organized for my style of working. The formats were predefined. The categories of information were set up in advance. This kind of arrangement works for an orderly person. I was more chaotic, with a number of projects in the works at once.

I eventually ran across the ideal information-tracker for the messy-desk type. It is a free-form note-taker that had been successful in the DOS world before it migrated to a graphical environment: Micro Logic's InfoSelect for Windows.

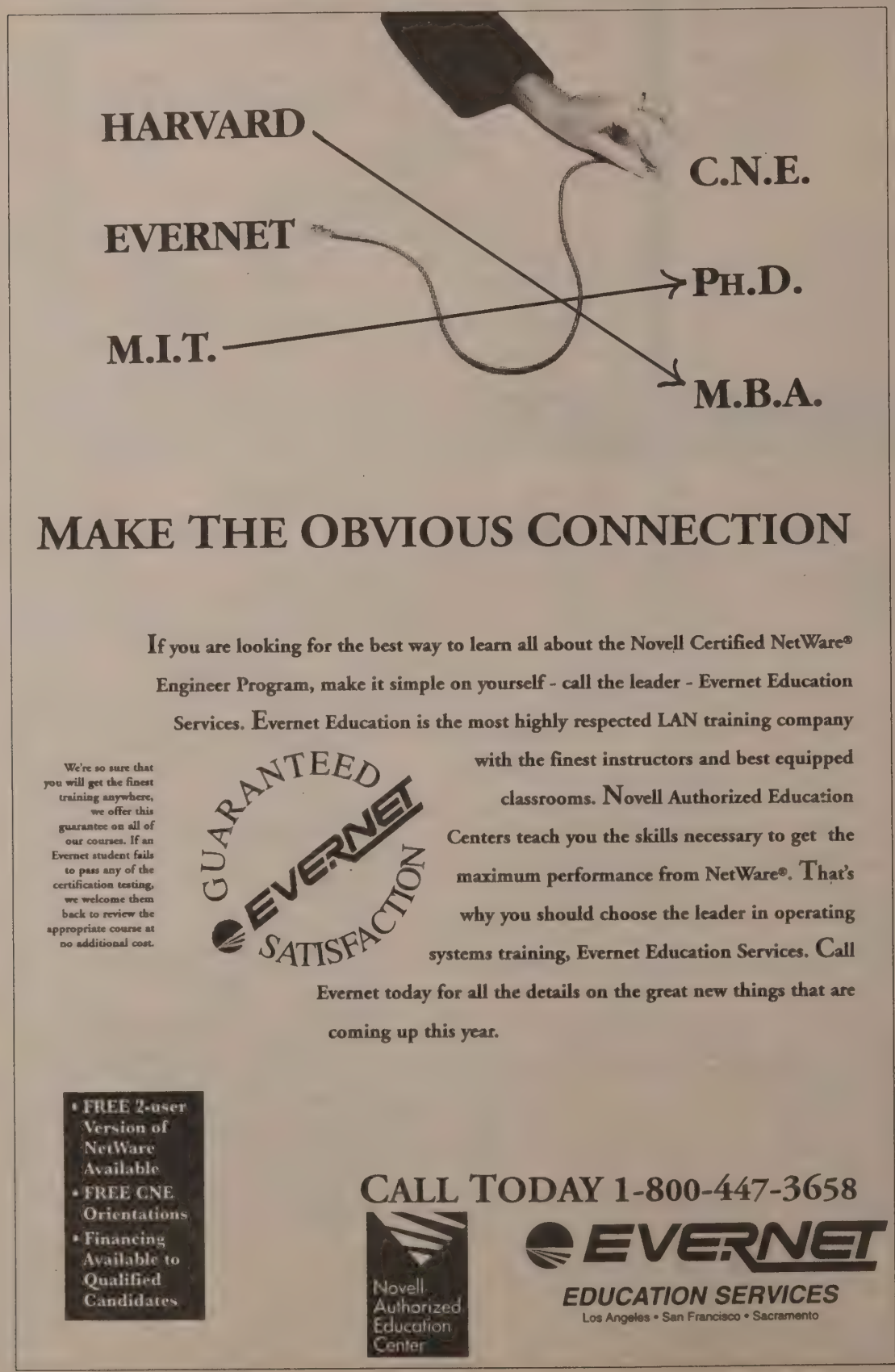
The metaphor in this program is one of stacks of notes. Each "note" in InfoSelect is like a small piece of paper that can hold any kind of written information. This is just like a shoe-box filing system. But the difference in InfoSelect is that you can *find* any note by any text that is written on it, instantly.

You would be amazed how rare it is for flacks to depend on the products they tout. I knew that this program was worthwhile when I found its publicist, Richard Leeds of Computer Product Introductions, actually *uses* it in his small Bellevue, Washington, office.

I have since put all the information for running my own business into InfoSelect files, which are called "stacks." One stack holds references for inclusion in future articles. A second is my "who" file—it has over eleven hundred people I have met in the last five years. A third is "history," for events that I may want to document in the future. Another stack contains markets. Another has recipes, and still another has jokes—InfoSelect serves avocations as well as it does business.

There is no need for a specific format in your notes. But if you want to make a database-like file, you can use field-markers to add structure to the free-form system.

The program can recognize dates, so I use it for a simple tickler. It has a relatively small number of additional features. You can build a mail-merge system to export


HARVARD
EVERNET
M.I.T.
C.N.E.
PH.D.
M.B.A.
MAKE THE OBVIOUS CONNECTION
If you are looking for the best way to learn all about the Novell Certified NetWare® Engineer Program, make it simple on yourself - call the leader - Evernet Education Services. Evernet Education is the most highly respected LAN training company with the finest instructors and best equipped classrooms. Novell Authorized Education Centers teach you the skills necessary to get the maximum performance from NetWare®. That's why you should choose the leader in operating systems training, Evernet Education Services. Call Evernet today for all the details on the great new things that are coming up this year.
We're so sure that you will get the finest training anywhere, we offer this guarantee on all of our courses. If an Evernet student fails to pass any of the certification testing, we welcome them back to review the appropriate course at no additional cost.
GUARANTEED
EVERNET
SATISFACTION
• FREE 2-user Version of NetWare Available
• FREE CNE Orientations
• Financing Available to Qualified Candidates
CALL TODAY 1-800-447-3658
Novell Authorized Education Center
EVERNET
EDUCATION SERVICES
Los Angeles • San Francisco • Sacramento

# BEST BUYS 50%-70% OFF

Made By IBM

## 486SLC Subnotebook

- Fax/Modem (9600 / 2400)
- 80 MB Hard Drive (40 MB HD - Double Spaced to 80 MB)
- Pen Pointing Device (Cordless Battery Operated)

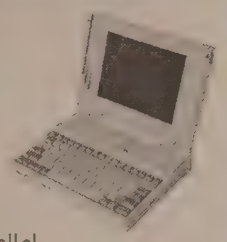
• 6 MB • 25MHz • 6" Backlit VGA LCD • 1.44 EXT FDD • Serial, Parallel, Keyboard, & SVGA Video Ports • DOS 6 • Windows 3.1 (for Pen) • 9" x 5.5" x 1.25" • Nickel Metal Hydride Battery • 4 Lbs. w/Battery, Keyboard and Carrying Case

**$649**

**MEMORY FOR NOTEBOOKS**

NEC AST TOSHIBA GATEWAY COMPAQ EPSON IBM

## EPSON - DUAL SCAN COLOR NOTEBOOK

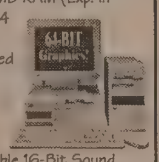


- 486 DX2/50MHz
- 4MB RAM
- 340 MB Hard Drive
- 1.44 Internal Floppy
- FAX/Modem
- PCMCIA Slot
- Carrying Case
- Trac Ball
- VGA Port, Serial/Parallel
- PS/2 Port
- Battery Charger
- 110/220 Volts
- Microsoft DOS
- 9.5" Dual Scan Color Display
- Local Bus Video Controller 1024 x 768
- One Year Warrranty

**$1599**

## SYSTEM SPECIALS

### GATEWAY LOCAL BUS PCI Desktop 486 DX2/66 MHz



128K Cache Memory, 8MB RAM (Exp. in 128MB on MB), 3.5" 1.44 FD, 420MB Hard Disk Drive (new). PCI Enhanced IDE Interface (Faster than VESA), 1MB PCI Local Bus Video, Dual Speed CD ROM (new), Sound Blaster Compatible 16-Bit Sound Card (new), Stereo Speakers (new), 4 16-Bit ISA, 2 32-Bit PCI, 1PG1/ISA Slots, MS DOS 6.22, MS Windows for Workgroups 3.11, Push Button Works (includes Word Processing, Spreadsheet, Database, Reporting), Gateway system CD (Replaces Diskettes (Windows, On-line User's Guides, Diagnostic & Virus Scan), QA plus Hardware Diagnostics Program. Compton's Encyclopedia, 1Year On Site Warraty (via Bell Atlantic)

**$1299**

### Major Manufacturer 486 DX2-66MHz

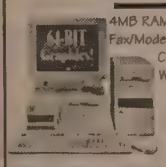
Pentium Upgradable

- 4MB RAM, exp. 40MB
- 420 MB HD • 1.44 FDD
- 96 FAX/Modem
- 1MB VLB card
- Dual Speed CD ROM
- 16 bit sound card
- Speakers
- 12 CD Titles
- Keyboard
- Mouse
- DOS 6.2.2, Windows, PFS Works, WinFax and Prodigy
- FCC Class B, UL, CSA

ONE YEAR ONSITE MANUFACTURERS WARRANTY

**$1299**

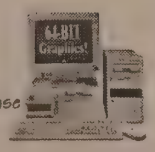
### IBM 486SX 33 MHz PS/1 ISA



4MB RAM, 170MB HD, Dual FDD, Fax/Modem, Keyboard, Mouse, SVGA Card, 3 ISA Slots, DOS, Windows, MS Works

**$999**

### TRIGEM PENTIUM P60



- PCI SLOT
- 8MB RAM
- 540 MB HD
- 1.44 FDD
- SVGA Card
- Mini Tower
- Keyboard & Mouse
- 2S/1P/1G
- FCC Class B
- ULCSA Appr.
- 1 yr. On-Site warranty

**$1499**

### IBM PS/2 E 486SL C2-50MHz PCMCIA Desktops

- 3.5" 1.44MB FDD
- 4MB RAM, 340 MB HDD
- 4 PCMCIA available slots
- Ideal for Networks
- DOS/Windows/Keyboard
- 3 Year IBM Warranty

**$599**

### IBM 486DX2-50MHz PS/1 Towers

- 4MB RAM/250MB
- Dual FDD/KB/Mouse/Local Bus SVGA
- DOS/Windows/MS Works
- Fax Modem w/Software
- RD w/1 Year Warranty

**$799**

AST & COMPAQ DESKTOP Call for All Models!

### TEXAS INSTRUMENTS COLOR NOTEBOOK

486 SX 25MHz

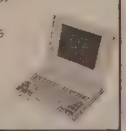
120MB HDD • 4MB RAM • 10" STN Color Display • 3.5" FDD • Clip-on Tracball • 5.9 LBS • DOS 6.2 • Windows 3.1 • Serial/Parallel • VGA • PS/2 Port

**$1299**

### TEXAS INSTRUMENTS NOTEBOOK T14000E

TFT Active Color

- 486DX2/50MHz
- 4MB RAM
- 200MB HDD
- 1.44 Internal Floppy Drive
- Trackball
- VGA Port.
- Serial/Parallel
- PS/2 Port
- Battery charger 110/220V
- DOS • Windows



**$1799**

Memory Upgrades for Notebooks & Laser Printers: Toshiba, AST, Compaq, IBM, HP, Okidata and others...Call for Details!

### IBM LEXMARK 386SXL 25MHz Notebook

4 MB RAM, 80 MB HD, Fax/Modem, Trackball, DOS, Windows, 1.44 FDD, VGA Port, Serial/Parallel, Qty 2

**$599**

### GATEWAY 286-12MHz, Notebook

8MB RAM, 40MB HD, Modem, External 1.44 FDD, DOS, One year warranty

**$399**

### EPSON ACTION NOTE 700

486 DX33, 4 MB RAM, 200MB Hard Drive, FAX/Modem, TrackBall, PCMCIA, Carrying Case, Battery Charger, 1.44 Internal Floppy Drive, MicroSoft DOS,110/220 Volt, One Year Warranty

**$999**

### TOSHIBA NOTEBOOKS

- T1900 486SX20, 4MB, 120MB HD, PCMCIA (B Stock) ..... $999
- T1910 (New) Mono, 4MB, 120HD ..... $1199
- T1950CS (New) 486, 40MHz, 4MB/200HD, Color ..... $1799
- T1950CT 4MB, 120HD, Active Color (B Stock) ..... $1799
- T2400CS (New) 486DX2/50, 4MB, 250HD, Dual Scan Color ..... $2499

CALL FOR BEST PRICE ON OTHER MODELS

### PCMCIA PRODUCTS FAX MODEMS

IBM 96.24 Fax Modem **$49**

IBM 14.4 Fax Modem **$189**

14.4/28.8 Fax Modem **$350**

ETHERNET CARD PCMCIA **$179**

### PRINTERS

ALPS LSX1600e 16ppm Laser Printer

- 300 DPI 2MB (exp. to 34MB)
- PCL 5 Emulation (Laserjet)
- 14 Bitmapped, 13 scalable fonts
- 2 Laserjet-compatible font slots
- Network Ready
- 3 Month Warranty

**$699**

STAR 24 Pin Printers

360 DPI 240 CPS

Epson/IBM Emulation, Parallel Interface **$129**

(Wide Carriage **$159**)

# MICROSEL, INC.

**1787 POMONA RD., SUITE B • CORONA, CA 91720**

**Voice: 909-734-8767**
**Fax: 909-734-8683**

Photos may not represent actual products
Some Systems may be refurbished

Prices and availability are subject to change without notice. All sales are final. Return for credit must be within 15 days and is subject to 15% restocking fee. Original shipping charges are non refundable. We are not responsible for compatibility or typographical errors. All equipment carries manufacturer's warranty. Listed prices reflect cash discount. Call for other methods of payment. We check for stolen credit cards.

your files' data. I have been using mail-merge to create bibliographies in the formats demanded by incompatible and intransigent academic consumers. One could as easily use it to manage a mailing list or a parts list.

There are very few font or layout controls. If you want to do extensive format control, you will be exporting things to a word processor.

But InfoSelect is primarily an instant retriever of any information. Because you store most items with one or two keystrokes, and find them literally in a second, you really do use the program. When I find a remarkable quotation on the Internet, I cut and paste it into an InfoSelect stack. I need an address, and I find it in another stack. A business associate needs to find a resource: if I have come across it since acquiring InfoSelect, I still have it; and I can find it before the question is finished.

InfoSelect also serves as my ASCII text editor. I use it more than any other program I own.

Two versions are available. A reduced program (InfoSelect Express) with only one stack of limited size costs $19.95, with an upgrade to the full version for $99.00. The full version with as many stacks as you wish costs $149.95. No, I don't understand the math either. I do recommend getting the full version one way or another, from Micro Logic Corporation or from retailers who may charge even less.

## Addictive Book Of The Month

If you thought the Internet was too chaotic and undocumented to be a business resource, think again. In the mail has arrived Harley Hahn and Rick Stout's *The Internet Yellow Pages: Second Edition.* Hahn and Stout are the writing partnership that gave us *The Internet Complete Reference,* so they have good credentials.

I found a well-written, witty compendium of Internet destinations for almost any conceivable purpose. Canadian Football League? Try page 651. Elvis Presley? Look on page 488. Puns? Page 388.

And a solid group of business and financial addresses. You can reach the Small Business Administration by gophering to *sbaonline.sba.gov* (although it was busy when I called). You can get a graph of the current daily Standard & Poor's Index by webbing off to *http://www.secapl.com/secapl/quoteserver/sp500.html* . One can also (it says here) buy and sell on the Internet Relay Chat by

*continued on page 82*

**Some years ago I made the choice to concentrate on Windows products. I thought the Macintosh was, if not dead, at least badly wounded. This was conventional wisdom at the time among many people working in the business world. The recent Macworld Expo in San Francisco has changed my mind.**

HIGH PERFORMANCE ----
"IT'S THE ONLY WAY TO COMPUTE"
CALL FOR THE BEST PRICING ON DRIVES

QUANTUM -------
1080S 1.0GB SCSI-2 3.5" 9ms $569.
2100S 2.1GB SCSI-2 3.5" 9ms $875.
ATLAS & GRAND PRIX 7200 RPMS
32150AL 2.1GB SCSI 3.5" 8ms $1099.
34301GP 4.3GB SCSI 3.5" 8ms $1799.

MICROPOLIS ----
MC 4221 2.1GB SCSI-2 3.5" 8.5ms $999.
MC 1936 3.1GB SCSI-2 5.25" 11ms $1395.
MC 3243 4.3GB SCSI-2 3.5" 8.5ms $1695.
MC 1991 9.0GB SCSI-2 5.25" 11ms $2950.

CONNER ----------
CFP1060S 1.0GB SCSI-2 3.5" 9ms $559.
CFP2105S 2.0GB SCSI-2 3.5"9ms $959.
CFP4207S 4.2GB SCSI-2 3.5" 9ms $1595
CALL FOR CONNER
TAPE BACKUP PRICING

SEAGATE -------
ST31200N 1.2GB SCSI-2 3.5" 9ms $549.
ST12400N 2.1GB SCSI-2 3.5" 9ms $995.
ST15230N 4.3GB SCSI-2 3.5" 9ms $1695.
ST410800N 9.0GB SCSI-2 5.25" $3095.
HIGH PERFORMANCE 7200RPMS
SEAGATE BARRACUDA 'S
ST32550N 2.1GB SCSI 3.5" 8.5 ms $1195.
ST15150N 4.3GB SCSI 3.5" 8.5ms $1795

WARRANTIES UP TO 5 YEARS

MDW TECHNOLOGIES
7246 REMMET AVE SUITE 208 CANOGA PARK, CALIFORNIA 91303 (818)703-0084 FAX (818)313-8949
1 - 800 - 644 - 7484
CORPORATE & GOVERNMENT PO'S ACCEPTED
NO SURCHARGE FOR CREDIT CARDS
ALL RETURNS NEED AUTHORIZATION NUMBER
PRICES SUJECT TO CHANGE WITHOUT NOTICE.
VISA MasterCard

NOVELL SOFTWARE
NetWare 3.12 5/10 User.....535. /1,179.
NetWare 3.12 100/250 User.....2,675./Call
NetWare 4.1 5/10 User.....599./1,279.
NetWare 4.1 25/50 User.....1,859./2,279.
NetWare 4.1 100/250 User.....2,859./Call
ARTISOFT SOFTWARE
Lantastic 6.0 5/10 User.....139./249.
Lantastic 6.0 25/50 User.....449./889.
Call us for all your LAN Inquiries
3Com & NE2000 10Base-T
ETHERNET CARDS (exp. 3-31-95)
3Com/NE2000...69./29.
InTech
714-589-0164

KURZWEIL voice
The Final Frontier
The Ultimate Solution For
Electronic Forms-On-Demand
mips TRANS FILL™
Stand-Alone or Voice-Enabled
Excellence is our Standard
800-776-6774
Distributed By: SONE SYSTEMS, INC
204-A Carleton Avenue, Orange, California 92667
mips TRANS FILL

# OUR ENERGY GOES INTO EXCELLENCE

## Pentium PCI

- Intel 64-Bit Pentium Processor
- 256K Cache
- 8MB RAM
- 540MB IDE Hard Disk
- Teac 1.44MB Floppy Drive
- 14" SVGA Non-Interlaced Monitor
- (1024x768NI, Green Energy Saving 72Hz)
- PCI Windows Accelerator Card (1MB Exp. to 2MB 16.7 Million Colors, 1280x1024)
- PCI Enhanced IDE Controller with 2 Serial, 1 Parallel, 1 Game port
- 101-Key Enhanced Keyboard
- Hi Resolution Mouse
- Mid Tower Case with 230W Power Supply
- 1 Year Parts
- 5 Years Labor

$49 per Month OAC

**Pentium 90 ..... $1795**
**Pentium 100 ..... $1895**

## 486 VESA Local Bus

- 256K Cache
- P24T/Overdrive Ready
- 4MB RAM (70ns)
- 420MB IDE Hard Drive
- Teac 1.44MB Floppy Drive
- 14" SVGA Non-Interlaced Monitor
- (1024x768NI, Green Energy Saving, 72Hz)
- 32-Bit VL Bus Windows Accelerator Card
- (1MB Exp. to 2MB 16.7 Million Colors, 1280x1024)
- 2 Serial, 1 Parallel, 1 Game Port
- 101-Key Enhanced Keyboard
- Hi Resolution Serial Mouse
- Mini Tower Case with 230W Power Supply
- 1 Year Parts Warranty
- 5 Years Labor Warranty

As Low as $27 per Month OAC

**486DX2-66 ..... $995**
**486DX2-80 ..... $995**
**486DX4-100 ..... $1075**

## DOUBLE SPEED MULTIMEDIA

SONY CD-ROM
SOUND BLASTER 16
MULTIMEDIA SPEAKERS
4 CD TITLES

**$215**

## QUAD SCSI PRO MULTIMEDIA

TOSHIBA QUAD SPEED SCSI CD-ROM
SOUND BLASTER SCSI-2
MULTIMEDIA SPEAKERS
4 CD TITLES

**$399**

## QUAD SPEED MULTIMEDIA

TEAC 4X CD-ROM
SOUND BLASTER 16
MULTIMEDIA SPEAKERS
4 CD TITLES

**$299**

# CALL FOR UPGRADES

## HARD DRIVE

| | |
|---|---|
| QUANTUM 420MB IDE | $169 |
| SAMSUNG 560MB IDE | $189 |
| MAXTOR 540MB IDE | $212 |
| MAXTOR 850MB IDE | $269 |
| WESTERN DIGITAL 1.08GB IDE | $395 |
| CONNER 1.06GB SCSI-2 | $495 |

## MOTHERBOARD

| | |
|---|---|
| PENTIUM 90 INTEL; 256K 4 PCI 2 VESA 3 ISA SLOTS; AMI BIOS; ZIF W/CPU | $839 |
| PENTIUM 100 INTEL; 256K 4 PCI 2 VESA 3 ISA SLOTS; AMI BIOS; ZIF W/CPU | $939 |
| 486DX2-66 INTEL; 256K CACHE; 3 VESA SLOTS; AMI BIOS; ZIF SOCKET W/CPU | $259 |
| 486DX2-80 AMD; 256K CACHE; 3 VESA SLOTS; AMI BIOS; ZIF SOCKET W/CPU | $239 |

## VIDEO CARDS

| | |
|---|---|
| Cirrus Logic VLB 1MB | $75 |
| Cirrus Logic VLB 2MB | $115 |
| S3 VLB 1MB | $75 |
| S3 VLB 2MB | $115 |
| Diamond Viper VLB 2MB V-RAM | $250 |
| ATI MACH 32 VLB 1MB D-RAM | $110 |
| ATI MACH 32 VLB 2MB D-RAM | $169 |
| ATI MACH 64 VLB 2MB D-RAM WIN TURBO | $180 |
| ATI MACH 64 VLB 2MB V-RAM WIN TURBO | $299 |
| ATI MACH 64 VLB 4MB V-RAM | $499 |
| Diamond Viper PCI 2MB V-RAM | $269 |
| Diamond Stealth 64 PCI 2MB D-RAM | $179 |
| Diamond Stealth 64 PCI 2MB V-RAM | $315 |
| Diamond Stealth 64 PCI 4MB V-RAM | $495 |
| ATI MACH 32 PCI 1MB D-RAM | $110 |
| ATI MACH 32 PCI 2MB D-RAM | $170 |
| ATI MACH 32 PCI 2MB V-RAM WIN TURBO | $255 |
| ATI MACH 64 PCI 2MB D-RAM WIN TURBO | $229 |
| ATI MACH 64 PCI 2MB V-RAM | $299 |
| ATI MACH 64 PCI 4MB | $539 |

## MONITOR

| | |
|---|---|
| MGC 1458, 14" 1024x768; NI; .28mm | $205 |
| MGC 1588, 15" 1280x1024; NI; .28mm | $290 |
| MGC 1765, 17" 1280x1024; NI; .26mm | $580 |
| MAG DX17F, 17" 1280X1024; NI; .26mm | $600 |

## CD ROM

| | |
|---|---|
| PANASONIC DOUBLE SPEED | $120 |
| MITSUMI DOUBLE SPEED | $117 |
| NEC TRIPLE SPEED SCSI-2 | $229 |
| TEAC QUAD SPEED IDE | $189 |
| TOSHIBA QUAD SPEED SCSI-2 | $279 |
| PLEXTOR QUAD SPEED SCSI-2 | $379 |
| MITSUMI QUAD SPEED | $215 |

## SOUND CARD

| | |
|---|---|
| SOUND BLASTER 16 BASIC | $78 |
| SOUND BLASTER 16 MCD | $79 |
| SOUND BLASTER 16 MCD ASP | $142 |
| SOUND BLASTER 16 SCSI-2 | $99 |
| SOUND BLASTER 16 SCSI-2 ASP | $162 |
| SOUND BLASTER AWE 32 | $248 |

# THETA COMPUTER
## CORPORATION OF AMERICA

3200 Airport Ave. #22 • Santa Monica • CA 90405

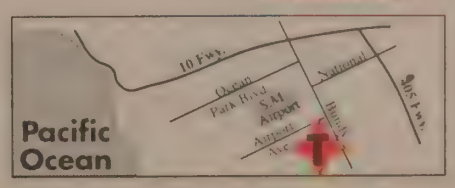
**(310) 572-1613**

FAX # (310) 572-1615

Corporate P.O.'s Accepted!

**Business Hours:**
M-F 9:00A.M.- 6:00P.M.
& Sat. 10A.M. - 4P.M.

90 Days Same As Cash. Financing Available.




Prices include 3% cash discount. Prices & Specifications are subject to change without notice. Not responsible for any typographical errors.

# WE PUT YOU ON THE INTERNET

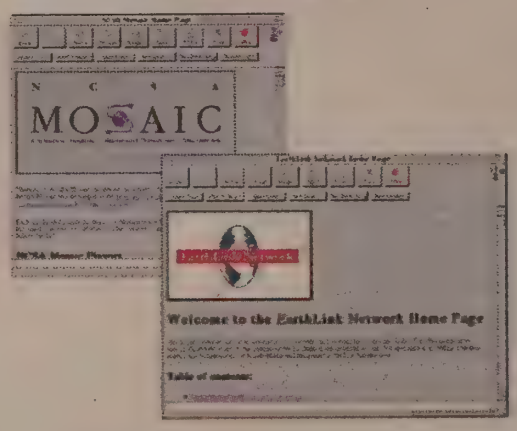
28.8K ACCESS & WIDER SERVICE AREA NOW AVAILABLE FREE!

## WHAT IS THE INTERNET?

The Internet is a network of computer networks spanning the globe. It has recently evolved into the most incredible communications medium the world has ever seen.

On the Internet, business people converse with associates, students search for information in thousands of databases and information resources, and ordinary citizens find, use, download, and originate information on a nearly infinite number of topics every day.

The Internet connects you instantly to over 30 million people around the world!




*We help set you up with Net "surfing" software such as Mosaic.*

## HOW DO I GET CONNECTED?

Until recently, getting connected to the Internet was a complicated procedure. Now, EarthLink Network connects you directly to the Internet from your home or business computer—fast and easily. All you need is a modem and the software we supply. We will answer all of your questions about the Internet and help you make it a useful and enjoyable part of your life.

EarthLink Network offers inexpensive direct access to the world-wide Internet.

Call us, and we'll fill you in on the details.

# CALL NOW 213-644-9500

EarthLink Network, Inc.
3171 Los Feliz Blvd., Suite 203
Los Angeles, CA 90039 • Fax: 213-644-9510
Automated info via email: info@earthlink.net
Live human via email: sales@earthlink.net

EarthLink Network™

©1994 EarthLink Network, Inc. Trademarks are property of their respective owners.

INTERNET • BY JOHN S. QUARTERMAN AND SMOOT CARL-MITCHELL

# How Big Is The Net Anyway?

## A New Estimate Of The Sizes Of The Internet And The Matrix

**How many people** use the Internet? Businesses make decisions based on answers to this question, and governments decide programs on them.

### The Survey

Starting 15 October 1994, Matrix Information and Directory Services and Texas Internet Consulting sent survey questionnaires by electronic mail to most of the domains representing organizations on the Internet, and we tabulated responses received through 15 December 1994. We received 1468 usable responses and used them to estimate the sizes of the Internet and the Matrix as of October 1994.

These are estimates, not exact and definitive figures. However, they are based on a large sample of the organizations (companies, universities, governmental agencies, individuals, etc.) on the Internet. Comparing the domain names of the responses with those of the original survey list, we calculate a confidence interval of about 38%. These are the only estimates of the size of the Internet that, so far as we know, have associated any confidence interval at all.

### The Estimates

Different people mean different things when they refer to the Internet. To avoid confusion, we provide definitions along with our estimates.

- For the Core Internet, we estimate 7.8 million users (people) of 2.5 million computers that can *provide* interactive services such as telnet (remote login), FTP (file transfer), or WWW (hypertext), as of October 1994.
- For the Consumer Internet, we estimate 13.5 million users of 3.5 million computers that can *use* the interactive services supplied by the Core Internet, for example people who can use Mosaic or Lynx to browse the World Wide Web, as of October 1994.
- For the Matrix, we estimate 27.5 million users who can exchange electronic mail with other users in the Matrix, as of October 1994.

### The Internet And The Matrix

These categories fit inside each other: the Matrix includes the Consumer Internet, which includes the Core Internet. It's like those Russian dolls, where you open up Yeltsin and find Gorbachev, and inside Gorbachev is Brezhnev.

To find which category fits you, apply these simple tests:

- If you can send mail to an address in the Matrix, such as *mids@tic.com*, you're in the Matrix.
- If you can connect with FTP to *ftp.ripe.net*, or use Mosaic or Lynx to reach *http://www.ripe.net*, you are in the Consumer Internet.
- If your computer runs an FTP, telnet, gopher, WWW, or other interactive server that users outside your own organization (your company, university, etc.) can use, then you're in the Core Internet.

The most important distinction is between the Matrix and the Internet. Mail is the simplest and most widely used network service, both on the Internet and on other networks. But it is not the distinctive characteristic of the Internet, since most other networks have it, too. The Internet's interactive services, supported by its TCP/IP protocols, are what distinguish it from other networks. You can access many of those services by mail, even including FTP, gopher, and WWW, but that's a completely different level of convenience, speed, and utility than using them interactively over the Internet itself. WWW by mail is like shopping by mail order catalog, while the Internet is like a big shopping mall.

### Where Other Networks Fit

We've summarized the host and user estimates for the Internet and the Matrix in Table 1, plus some of the information we used in compiling the estimate for the Matrix.

0. Country estimates by MIDS, from "Matrix Size Update," *Matrix News*, V5, N1, January 1995.

1. Can provide interactive Internet services, such as FTP or WWW. Includes

EACH YEAR THERE ARE AS MANY NEW *people* ON THE INTERNET AS ALL THE *people* ON THE INTERNET THE YEAR BEFORE.

**Table 1:** Sizes of the Internet and the Matrix

| Countries [0] | Hosts | Users | Network |
|---|---|---|---|
| ? | 2,500,000 | 7,800,000 | Core Internet [1] |
| 88 | 3,500,000 | 13,500,000 | Consumer Internet [2] |
| 54 | 1,481 | 111,000 | BITNET [3] |
| 96 | 32,000 | 2,560,000 | FidoNet [4] |
| 144 | 18,800 | 564,000 | UUCP [5] |
| ? | ? | 8,000,000 | Centralized Systems [6] |
| 16 | ? | 27,500,000 | The Matrix [7] |

# Network Intensive

*The Complete Internet Solution*

**Local Access throughout the L.A. Basin!**
12 Locations in 213, 310, 714, 805, 818, & 909
Digital connections: ISDN, 56K, 128K, 384K, and T1
Dialup PPP/SLIP connections: 28.8 Access
Multiple upstream connections!

## Your Business Internet Provider

**Installation Assistance**
Configuration and Implementation
Onsite Installation of hardware/software
Telecommunications Circuits

**World Wide Web Services**
Home Page w/every business account
Comprehensive Hosting Services
HTML Programming Services

**Technical Support**
24 Hour Support
Telephone and Email Support
Onsite Support Available

**Consulting Services**
FTP & Web Server Configuration
Network Design
Security Services

*For more information, call Network Intensive at* ***1-800-273-5600,***
*email* ***info@ni.net*** *or see our home page at* ***www.ni.net.***



# DISCOVER THE INTERNET

**NOW ONLY $17.50 PER MONTH**

**Unlimited access with no hourly connect fees!**
**Why pay long distance phone charges?**

*CRL brings the Internet to you with a local call from any of the following areas:*

| | | | | |
|---|---|---|---|---|
| Alamitos | Compton | Glendale | La Habra | Pasadena |
| Alhambra | Culver City | Hawthorne | Los Angeles | Pico Rivera |
| Anaheim | Cypress | Huntington Beach | Mar Vista | Placentia |
| Beverly Hills | Downey | Inglewood | Montebello | Santa Ana |
| Brea | Fullerton | Irvine | Norwalk | West Los Angeles |
| Buena Park | Garden Grove | La Canada | N. Hollywood | Westminster |
| Burbank | Gardena | La Crescenta | Orange | Yorba Linda |

**CRL provides local internet access to over 500 cities nationwide**

*A CRL personal account gives you unlimited access to E-Mail, Usenet News, FTP, Telnet IRC, WAIS, Archie, Gopher, CRL's vast local archive of PC, Mac and UNIX software, plus 24 hour customer support for only $17.50 a month. There are no hourly connect or usage charges, so stay on as long as you like!*

To receive additional information use the dialup below (login:guest)
or contact CRL for your dedicated line, dialup, or custom IP service needs.

**For free information call:**
*Voice:* 415-837-5300
*DIAL-UPS:* 213-236-9944
714-517-6700
*E-MAIL: info@crl.com*

Personal account paid by Visa/M.C. $19.50 Init. Fee

CRL
WORLWIDE NETWORK CONNECTIVITY




AOL, Delphi, and BIX.

2. Can use interactive Internet services, such as FTP or WWW. Includes 1, plus numerous firewalled enterprise networks.

3. BITEARN host table, courtesy EARN and SURFNET; user estimate by MIDS.

4. FidoNet host table, courtesy Randy Bush; user estimate by MIDS.

5. UUCP map (host table), plus RIO nodelist from ORSTOM, and a few countries from Larry Landweber; user estimate by MIDS.

6. Conferencing and mail systems such as Prodigy, CompuServe, PC VAN, NIFTY-Serve, AT&T Mail, GEnie, etc.

7. Can use electronic mail. Includes 1, 2, 3, 4, 5, and 6.

"Preliminary Partial Results of the Second TIC/MIDS Internet Demographic Survey," *Matrix News*, V4, N12, December 1994

What about UUCP, FidoNet, WWIVnet, and BITNET? They're all in the Matrix. These networks are not part of the Internet, although some of their hosts are. We counted their users in our estimate of the size of the Matrix.

What about Prodigy, CompuServe, Nifty-Serve, PC-VAN, AT&T Mail, GEnie, Sprint-Mail, Easy-Link, MCI Mail, and Tymnet? Those ten systems (and quite a few others like them) are all in the Matrix, but not yet on the Internet. We have counted the users of these systems in our estimate for the Matrix. Some of them are moving towards letting their users use interactive Internet services, and when they do, we will start counting those that do as part of the Consumer Internet.

A few similar centralized systems, such as AOL, Delphi, and BIX, already let their users use interactive Internet services, and are therefore on the Internet, and we counted their users in our Consumer Internet user estimate. Some of these three systems may actually be in the Core Internet (Table 1 shows them that way), but until we're sure we are counting them as being in the Consumer Internet.

## Other Information From The Survey

The survey questionnaire included many other questions, and we may present the results of more of them in later columns. Here are a few more details for the moment.

It appears the male/female ratio among Internet users is less than 2/1, that is, about 60/40 male/female. That is a much higher proportion of female users than has been reported from other sources. However, we find it quite plausible, simply because of all those students in all those universities.

Another question we asked was about the speed of each organization's connection to the rest of the Internet. As you can see in Table 2, clearly the most popular speeds

Popular PC and Mac Titles

# ACP Software

Over 30,000 Pieces

# Bonanza•Save up to 90%

## Software Sale! Final PC Markdowns!

### 486DX2/66

- 4Mb RAM
- 420Mb Hard Drive
- 14" SVGA Color Monitor
- VL Local Bus Graphics with 1Mb
- 3.5" Floppy Drive
- 101 Keyboard
- Hi-res Mouse
- DOS/Windows

$1199

Save Now on a Complete 486DX2/66 System

### U.S. Robotics New! 28.8K Fax/Modem

Supports V.FC at 28.8K, v.32 bis at 14,400 bps and all earlier ITU-T standards. Sends/receives Group III fax at 14,400 bps.(int)

$197

### Limited Offer!

COMPAQ

**Presario 850**

486/50 MiniTower with 270Mb hard drive, 4Mb ram, fax/modem and more. (with purchase of monitor)(FR) ..... $899

$899

SMART $139.95

Modular Technologies

**Fax & Voice 14.4K PCMCIA**

send/receive data and voice at 14,400 bps new low price! 14.4 Fax and Voice ..... $139.95

### IDE Hard Drive Sale

•Maxtor •Conner • WD • IBM

- 340Mb ... 199.95
- 420Mb ... 219.95
- 550Mb ... 299.95 SCSI
- 1 Gb ..... 449.95 IDE

**1Gb IDE Hard Disk**

One Gigabyte! new low price

$449.95

### JUMBO 350

**Colorado**

New! 350Mb Tape Backup now in stock!

$179.95

**550Mb SCSI Hard Drive**

Micropolis 10 ms access. limited supply

$299.95

**Doublespeed CDROM Drive**

250ms Sanyo with AT interface and 10 titles on 1 CD.

$139.95

**Lotus Smart Suite v1.1**

Includes: AMI Pro CC:Mail Lotus 123 Freelance

$39.95

**Quad Speed CD-ROM Kit**

Breakthru Price!! quadspeed CD-ROM Drive with AT interface MPC-2, Kodak Photo CD and Multisession compliant.

Complete kit with speakers, and software plus free CD's

$399.95

Breakthru Price!

**DoubleSpeed Kit**

New Release! Doublespeed CD-ROM Drive, SoundBlaster 16 compatible card with 16-bit stereo sound! Super easy to install! Comes with video install program. Speakers, microphone, IDE interface,

Plus Free Software

$199.95

**Special Purchase PCMCIA Sound Card** limited supply

Tempo Audio Card from I/O Magic

Includes: PCMCIA Type II Card and over $300 value software

Retail Price $399 Save now at ACP!

$229

**Video Capture Card** limited supply

Tempo Video Capture Card PCMCIA Type II

Retail Price $599 Save now at ACP!

$299

### More Sale Titles! Save up to 90%

| | |
|---|---|
| StarWars Chess/3.5" | $9.95 |
| Harrier Assault/3.5" | 9.95 |
| Frederick Pohl/3.5" | 11.95 |
| Gabriel Knight/3.5" | 17.95 |
| Jack Nicklaus/3.5" | 6.95 |
| Shadowlands/3.5" | 8.95 |
| Mac Best Sellers | 19.95 |
| Far Side/3.5" | 9.95 |
| Barbie/3.5" | 9.95 |
| Kid Pix/Mac | 9.95 |
| Inca/Sierra CD/DOS | 24.95 |
| Jutland/SW Sorcery CD | 19.95 |
| Chessmaniac 5 billion | 9.95 |
| CyberRace/3.5" | 19.95 |
| Super VGA Harrier/CD | 19.95 |
| Tetris Classic/3.5" | 12.95 |
| Nick Price Golf/3.5" | 4.95 |
| Family Doctor/CD | 17.95 |
| Captain Comic/3.5" | 4.95 |
| Horse Trainer/3.5" | 9.95 |
| Shadow President/3.5" | 9.95 |
| Greg Lamond/3.5" | 9.95 |
| Earl Weav Baseball2 | 9.95 |
| Vampires Coffin/CD | 9.95 |
| World Tour Tennis | 9.95 |

**More CD Specials**

| | |
|---|---|
| Sierra's Inca | $19.95 |
| SVGA Harriers | 19.95 |
| Lamond Bicycle | 14.95 |
| My Adv. Labeler | 19.95 |
| Hell Cab | 19.95 |
| Family Health | 19.95 |

**Mac Just-in!**

Raydream
**Raydream Designer 3.0**
**Jag II**
**Add Depth**
Farallon
**Timbukto Pro**
FIT Software
**Field Assistant**
*save over 50% while supply lasts*

**Plus 100's more Titles at Giveaway price**

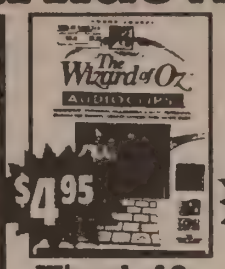
Hundreds of titles reduced for quicksell! Buy 5 and save 5 titles for $9.95 Values to $149.95

$2.49

**New! Vol II CD 10-Pack**

Inc: Family fun, Rock n' Roll, Movie Select,Sherlock, Arts n'Letters, Battle Chess and more! Also in stock Vol.I and the new 3ft6 pack of 6 CD's for Kids!

$34.95




$4.95

**Wizard of Oz**
AudioClips

$9.95

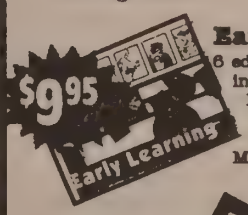
**Party Planner**
complete planner

$7.95

**Bicycle**
with Greg Lamond

$4.95

**Learn Word**
from ATI



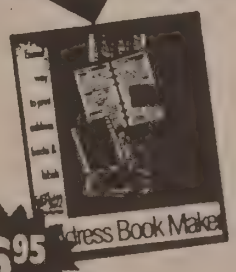

$9.95

**Early Learning**
6 education programs in one! For grades 1-6. Includes: Info Quiz Improve Spelling Reading, Math Mind Games and more!

**Publish It!**
Complete Desktop publisher with word processor, layout tools, graphics, and design templates

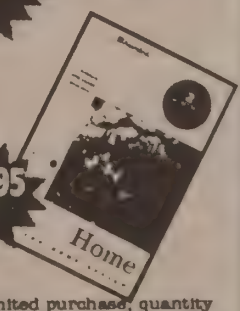
$19.95

**Address Book Maker**
Easiest way to print address books and labels. IBM/Windows




$6.95

**Autodesk HOME**
Accurate Home Design Made Easy for DOS




$24.95

special limited purchase, quantity limited first-come, first served. some Factory Renewed(FR)


Advanced Computer Products, Inc.

ACP SUPER STORE

Since 1976

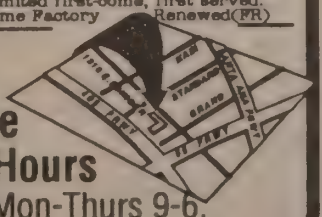
1310 E. Edinger Santa Ana, CA

Edinger at Grand

FAX (714) 558-8849

Retail Store (714) 558-8813

Corporate and Government Sales (800) FONE-ACP

Store Hours Mon-Thurs 9-6, Fri-Sat 9-5


©1993 ACP, Inc. Prices subject to change without notice. All logos and trademarks are copyrights and trademarks of their respective owners

Have you seen the Web yet?

DirectNet, your personal and professional connection to the Internet is ready to show you the World Wide Web right now. With software that is currently available for most computers you can effortlessly take advantage of all the Internet has to offer. Browse the World Wide Web and see for yourself what all the excitement is about, send and receive e-mail around the world, and download software with just a few clicks of your mouse.

DIRECT NET 213. 383. 3144

Call DirectNet today and let us put the power of the Internet to work for you. At speeds you never thought possible and at prices that will make you wonder what you've been waiting for!

http://www.directnet.com • info@directnet.com

$15^{00}$ A Month

KAIWAN INTERNET

Unlimited Access with no per hour charge!

Local call to Southern California!

Why pay toll calls?

KMENU Friendly User Interface for UNIX ignorant!

You don't even need to know UNIX!

KAIWAN offers full Internet Services including:

E-Mail, Shell Access, Telnet, FTP, Rlogin, Finger, Read News, Disk Space, 16.8K/14.4K Super High Speed Modems for dial-in, U/X/Y/Zmodem, Kermit, IRC, POP3, UQWK, MUDs, MUSE, TinTin, TF, Gopher, WWW, LYNX, WAIS, Yarn, Soup...

KAIWAN also offers UUCP, Domain Name Service, WWW Home Page, E-Mail Forwarding, Dial-in and Leased line SLIP/PPP connections and other Lan connections.

How to reach KAIWAN?

Phone: 714/638-2139 (Voice) 714/638-0455 (Fax)
Internet: Telnet KAIWAN.COM (Login as guest)
Anonymous FTP KAIWAN.COM:pub/KAIWAN
E-Mail info @ KAIWAN.COM
Finger root @ KAIWAN.COM
Modem 714/638-4133 (North Orange County, Long Beach/Alamitos)
Dial-in: 714/524-5545 (Chino, Diamond Bar, La Puente)
714/951-3679 (South Orange County, San Clemente)
909/785-9712 (Corona, Arlington, Riverside, Moreno Valley)
310/527-4279 (Los Angeles, South Bay, Long Beach)
818/579-5103 (Pasadena, San Gabriel Valley, Covina)
818/756-0180 (San Fernando Valley, Santa Monica, W.LA)
818/592-6673 (Malibu, Agoura, Simi Valley)
805/294-9338 (Valencia, Canyon Country, Newhall)

were 56Kbps and 64Kbps, with 18% each, or 36% of all connections. This is known in telephone parlance as DS-0, and is the bandwidth of a standard voice telephone circuit.

The next most popular speed was 14.4Kbps, with 13%. V.42bis modems are quite popular, it seems, and many organizations use them for their connection to the Internet.

Third most popular is 1.544Mbps, or T-1, with 12%. Adding the 4% for 2Mbps, or E-1, would show this general level of speed more popular than 14.4Kbps. 9600bps follows with 7%, and 19.2 with 6%.

We rather wonder about the organization that reported 10Gbps; we suspect it was a typo. We're also a bit suspicious about all the organizations that reported 10Mbps, since that's of course the nominal bandwidth of Ethernet, and not many Ethernets are actually used for external connections. Similarly for 100Mbps, which is FDDI speed. 28.8Kbps, or V.34bis, is catching on.

**Table 2:**
Speeds of Principal External Connections to the Internet

| | |
|---|---|
| 56 Kbps | 18.21% |
| 64 Kbps | 18.21% |
| 14.4 Kbps | 12.75% |
| 1.544 Mbps | 11.64% |
| 9600 bps | 6.71% |
| 19.2 Kbps | 5.92% |
| 10 Mbps | 5.65% |
| 2 Mbps | 4.14% |
| 128 Kbps | 4.08% |
| other speed | 2.56% |
| 28.8 Kbps | 2.37% |
| 512 Kbps | 2.24% |
| 256 Kbps | 2.10% |
| 100 Mbps | 1.25% |
| 45 Mbps | 0.66% |
| 2400 bps | 0.66% |
| 4800 bps | 0.46% |
| 1200 bps | 0.26% |
| 10 Gbps | 0.07% |
| 274 Mbps | 0.07% |
| 1 Gbps | 0.00% |
| 100 Gbps | 0.00% |

## Growth And Dates

The exact size of the Internet can only be estimated, but one thing that is known for sure by many different measurements is that the Internet is growing exponentially, approximately doubling in size each year, and has been doing so for at least the past six years now. Each year there are as many new people on the Internet as all the people on the Internet the year before. That's why it is important to cite a date for any estimate of the size of the Internet. Our estimates here are for October 1994.■

Copyright © 1995 by Texas Internet Consulting (TIC), tic@tic.com, (512)451-6176, fax (512)452-0127, 1106 Clayton Lane, Suite 500W, Austin, TX 78723 USA

# INTERNET

## Services for Individuals

### PPP/SLIP

Your computer is connected directly to the Internet! Run the latest graphical software such as MOSAIC and Netscape. Includes Full News, E-Mail, Personal Web Page, Telnet Shell, and much more. Free preconfigured Windows and Mac Software.

| | |
|---|---|
| Sampler Account: | $9.95/mo. - $1.75/hr. after 5 free hours |
| Regular Account: | $24.95/mo. - $1.50/hr. after 75 free hours |
| PowerUser Account: | $39.95/mo. - $1.25/hr. after 150 free hours |

Additional services available for the enthusiast or small business.

### Shell

Access the Internet from virtually any computer with a modem. No special software is needed. Text-based interface gives you full News access, E-Mail, Gopher, FTP, Telnet, WWW, and much more.

| | |
|---|---|
| Shell Account: | $14.95/mo. - Unlimited access |

### Sign-Up Online!

Call (714) 778-0370 to talk to a sales representative or sign-up online by dialing any of Delta's local access numbers from your computer. Login as 'guest' with a password of 'newuser'.

## Services for Business

### World Wide Web

Delta has a full range of WWW hosting services. From economical shared public servers to high performance private dedicated servers, and secure transaction capability, Delta can host the simplest Home Page to the most sophisticated form and database oriented applications. Delta's expert staff can provide as much assistance as you may need to develop your company's complete presense on the Internet including WWW Home Page design and construction, FTP, Gopher and List Servers.

Commercial WWW hosting starts at $49.95 per month and includes monthly access statistics and basic forms capability.

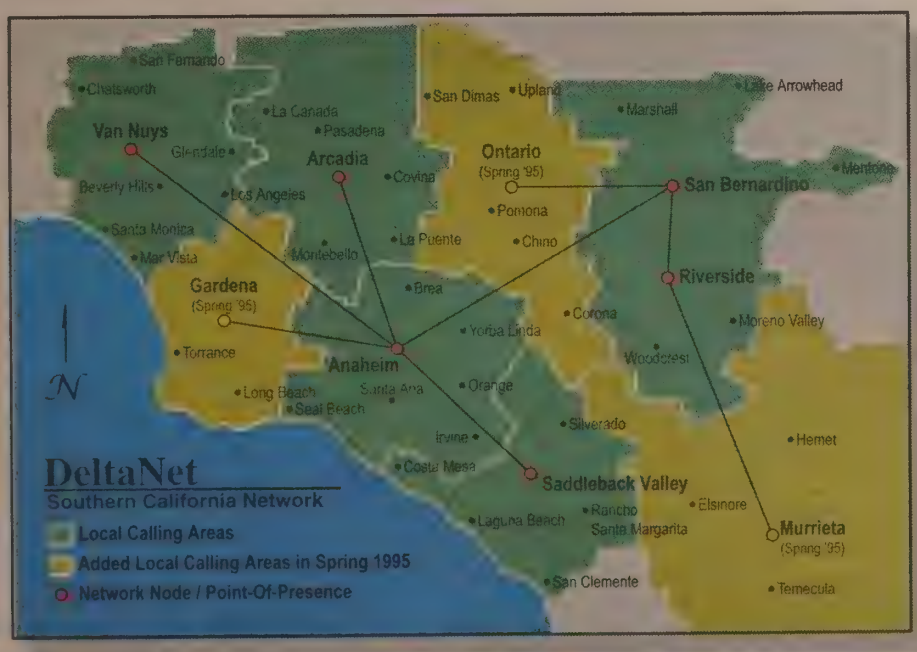
### Dedicated Connections

Delta's robust wide area network infrastructure can provide local leased-line connections, from 56K to T1 and above, over most of the Southland. Delta also offers unlimited dial-up PPP with IP routing, dedicated ISDN, and nation-wide frame relay access.

### Consulting and Training

Delta's expert staff can provide training and consulting services for virtually any Internet or Wide Area Network related project.

## Exclusively 28.8Kbps v.34 Modems, The First and Only in Southern California
## Free Windows and Macintosh PPP/SLIP Software - Friendly Telephone Support




## The Southland's Most Extensive Internet Network

With strategically located Internet Nodes and advanced regional fiber optic technology, Delta offers the customer local access numbers, local leased-line connectivity and unrivaled access speed throughout the Southland. Nearly 100% coverage will be available in Spring 1995.

| | |
|---|---|
| **Anaheim** *(310 and 714)* | 714 778-8400 |
| **Saddleback Valley** *(714)* | 714 597-8100 |
| **Arcadia** *(213 and 818)* | 818 821-4400 |
| **Van Nuys** *(213, 310 and 818)* | 818 997-1300 |
| **San Bernardino** *(909)* | 909 381-2000 |
| **Riverside** *(909)* | 909 222-0200 |

**Available in Spring 1995**

| | |
|---|---|
| **Ontario** *(909)* | 909 390-xxxx |
| **Gardena** *(213 and 310)* | 310 352-xxxx |
| **Murrieta** *(909)* | 909 696-xxxx |

© Copyright 1995 Delta Internet Services. Trademarks are the property of their respective owners

DeltaNet

731 East Ball Road - Suite 204 - Anaheim - CA 92805 - (714) 778-0370 - FAX: (714) 778-1064

WWW: http://www.delta.net/ Human: sales@delta.net Automated: info@delta.net

DELTA INTERNET SERVICES

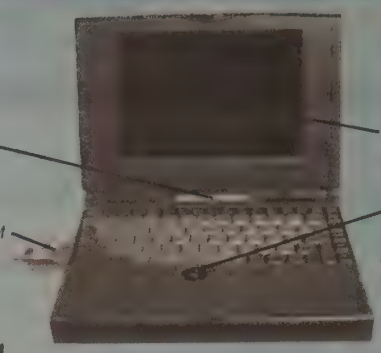
# The CALIFORNIA COMPUTER The CALIFORN

## TROGON 380 SOUNDX

- SL Enhanced 486DX-33, DX2-50/60 DX4-75/100
- 4MB RAM, Easy Expand up to 20MB
- 128KB Bios Flash ROM
- Int. 250MB Hard Disk (340/520MB)
- 3.5" 1.44MB Floppy Drive
- Ports for 1S, 1P (Bi-Directional), VGA, PS2 Keyboard, Audio Jack, Earphone out
- PCMCIA 2 Type II or 1 Type III
- 85/86-Key PC/AT w/12 Function Keys KB
- 16mm Center Micro Trackball Mouse Built-in
- 10.3" Dual Scan DSTN 640x486 Simultaneous
- 9.5" Active Scan TST 640x486 Simultaneous
- 32-bit VLB w/1MB VRAM Windows Accelerator NiMH Rechargeable up to 4.5hr Quick-Charge
- Weight: 6.3lbs Size: 10.9"W x 8.58"Dx1.75"H
- Accessories for: Docking Station, External Battery Charger, Automobile Car Cable

*LED Indicator*
- Battery in use/Charging
- AC, DC and Low Battery Status
- HDD, FDD in use
- Caps Lock, Numbers Lock, Scroll Lock
- PCMCIA in use

*Choice of two Type II or one Type III PCMCIA socket*
- Fax/Modem
- SCSI Card
- Network Adapter
- Hard Disk
- Memory Card



*Multimedia Notebook*
LOCAL-BUS PCMCIA

*10.3" Dual Scan 640x480 W/Local Bus and Window Accelerator Simultaneous Display*

*16mm center micro track ball*

### Du-Scan

| | |
|---|---|
| 486SX-33 w/ 260Mb HDD | $1850 |
| DX2-50 w/340Mb HDD | $1950 |
| DX2-66 8Mb RAM w/340Mb HDD | $2180 |
| DX4-75 8Mb RAM w/520Mb HDD | $2643 |
| DX4-100 12Mb RAM w/520Mb HDD | $2875 |

### Mono

| | |
|---|---|
| 486SX-33 w/ 260Mb HDD | $1393 |
| DX2-50 w/ 260Mb HDD | $1455 |
| DX2-66 8Mb RAM w/340Mb HDD | $1663 |

*Mono Model Does Not Have Sound Chip Built-In

### Active

| | |
|---|---|
| 486DX2-66 8Mb RAM w/ 340Mb HDD | $2999 |
| 486DX4-75 12Mb RAM w/520Mb HDD | $3675 |
| 486DX4-100 20Mb RAM w/520Mb HDD | $3999 |

intel inside pentium PROCESSOR

*90 MHz Available*

### Du-Scan Pentium

| | |
|---|---|
| Pentium 90Mhz 8Mb RAM w/ 540Mb HD D | $3790 |
| Pentium 90Mhz 20Mb RAM w/ 720Mb HDD | $4525 |

### Active Pentium

| | |
|---|---|
| Pentium 90Mhz 20Mb RAM w/ 420Mb HDD | $5772 |
| Pentium 90Mhz 8Mb RAM w/ 540Mb HDD | $5036 |

## TROGON

- 486 DX-33
- 4Mb RAM,120(200)Mb HD R
- 1.44Mb Floppy Drive
- 8.5" Active LCD 640 x 480, 64 gray
- Build-in Trackball Mouse
- 1 Serial, Parallel, Mouse, VGA, Keyboard Port
- 83-key keyboard
- Lightweight: 5.5lbs
- Dimensions: 8.7" x 11.1" x 1

## TROGON 400

- Built-in Mouse Point/Track point
- 16-bit Sound Blaster compatible sound system
- NiMH powered rechargable battery
- Advanced Power Management
- Built-in Microphone & stereo speakers
- CD-Rom
- Intel DX2-50, DX2-66, DX4-75 or 100MHz
- CD-Rom Bus Interface Ready
- 4MB Base, expandable to 32MB (regular 72-pin)
- Removable FDD for 2nd battery
- 9.5" DualScan & TFT Active LCD Screens
- 32-bit VESA LB w/ 1MB
- PCMCIA Type-III & Type-II

### Mono

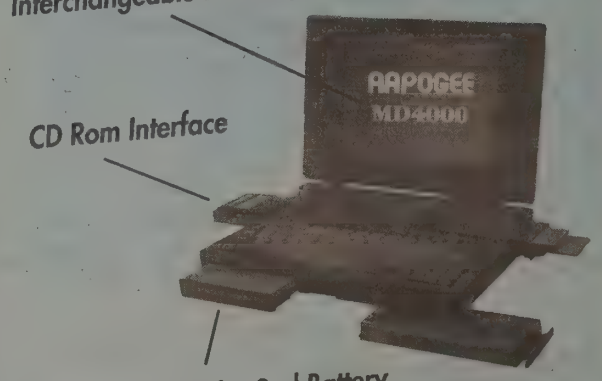
| | |
|---|---|
| 486SX-33 w/ 260Mb HDD | $1355 |
| 486DX-2 w/ 340Mb HDD | $1555 |
| 486DX-4 w/ 520Mb HDD | $1995 |

### Du-Scan

| | |
|---|---|
| 486SX-33 w/ 340Mb HDD | $1899 |
| 486DX2-66 8 Mb w/ 340Mb HDD | $2125 |
| 486DX4-100 8MB w/ 340Mb HDD | $2445 |

### Active

| | |
|---|---|
| 486DX2-66 8MB, w/ 340Mb HDD | $2925 |
| 486DX4-100 8MB, w/ 520Mb HDD | $3245 |




## CD-ROM DI Ex

The CD revoluti on is here! A new EPP external CD-ROM drive that simply plugs into y parallel port and gives you gr performance. Supports EPP, ECP and standard parallel por

## Canon Notejet & Notejet 2

- 486SX-33/486SLC2-50 MHz
- 4MB Up to 12MB
- 1.44MB Floppy Drive
- 130MB Hard Disk (190MB Option)
- Bubble Jet Printer Built-In
- Automatic Sheet Feeder Built-In
- PCMCIA - 2 Type II
- 10" LCD VGA Screen
- Canon 2-Button Hand Hold Trackball
- MS DOS 6.0, WINDOWS 3.1
- 7.7 Lbs. w/Bubble Jet Printer Inside
- One Year Road Side Service

| NotteJet | MONO | DSTN |
|---|---|---|
| 486SX-33 4/120 | $1577 | $2029 |
| 486SX-33 4/200 | $1940 | $2471 |
| Notebook V | MONO | DSTN |
| 486SLC2-50 4/130 | N/A | $2174 |
| 486SLC2-50 4/260 | N/A | $2598 |

## TROGON 800

- 32Bit VL-Bus
- 10.3" Dual Scan LCD Display
- Intel 486DX4-100MHz
- 4MB RAM Expandable to 32 MB
- Phoenix BIOS
- 3.5 Removable Floppy Drive
- Exchangeable to second battery
- 1 Parallel, 1 Serial, 1 Line-in, 1 Line-out audio Jack, 1 Microphone Jack, external VGA, Keyboard Port
- 6 lbs with Battery Optional second battery, Docking Station
- Built-in speaker, microphone and 25mm Super Trackball
- PCMCIA Slot Type III

*This Month's Special*

LOCAL-BUS PCMCIA

486DX4-100MHz 4MB/340MB HDD $2095

## PCMCIA SOLUTIO

*14.4 FAX/MODEM*
*ETHERNET COMBO*
*2MB FLASH CARD*
*4MB FLASH CARD*
*SCSI*

## Canon

**Bubble Jet** *BJC-600 color* 720 x 360 dpi **$445**

**Bubble Jet** *BJ-200e* 360 x 360 dpi 256 Gray Scale **$217**

**Bubble Jet** *BJC-4000color* 720 x 360 dpi **$346**

**BJ-10sx**
- 110 Characters/Sec
- Laser-Like Printer
- 2-Year Warranty

**$235**

**LBP-430** *Same as HP 4L*
- 22 Fonts ( 8 Scalable )
- 1Mb up to 5Mb
- 2 Year Warranty

**$554**

## NANAO

Trinitron

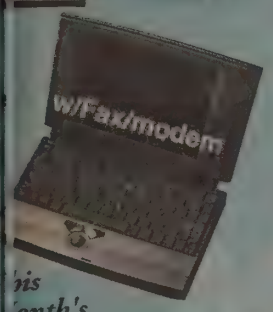
T2 / 20 .....$1899
T2 / 17 .....$1299

**T-Serie**

**Ask About our GE 3 Years Extended Warranty and 90 Day Same as Cash Financing Program**

# IA COMPUTER *The* CALIFORNIA COMPUTER

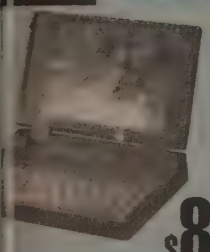
**03** 486DX-33




*his Month's Special*

**$1888**

**340** 486SLC-33



**$899**

**$259**

## PENTIUM PCI

**Intel Pentium Neptune Chipset**

- New Intel Pentium CPU 90 Mhz
- 256K Cache up to 512K
- 8MB RAM up to 128MB
- Teac 1.44MB Floppy Drives
- 730MB Hard Drive
- PCI IDE/FDD Controller w/2S, 1P
- Diamond Stealth 64PCI w/2MB DRAM
- Tatung 15" SVGA NI Monitor w/Speakers
- Quad Speed CD-ROM (193ms)
- Sound Blaster 16-bit MCD Sound Card
- 17 CD Titles
- 101 Enhanced Keyboard
- Serial Mouse
- Mid Tower Case w/230w PS

**90Mhz..... $2348**

(Intel Pentium Neptune Chipset)

## 486DX2 VLB 66

**Multimedia**

- 486 DX2-66 Mhz CPU
- 256K Cache, 2 Local Bus/7 ISA Slots
- 8MB RAM up to 32MB
- 1.44MB Floppy Drives
- 560MB Hard Drive
- VESA Local Bus IDE/FDD Controller w/2S, 1P
- VESA Local Bus SVGA Card w/1MB
- 15" SVGA NI Monitor .28 Dot
- Double Speed CD-ROM
- 16-bit Stereo Sound Card w/2 Speakers
- 101 Enhanced Keyboard
- Serial Mouse
- Mid Tower Case w/230w PS

**$1350**

## 486DX2 VLB 66

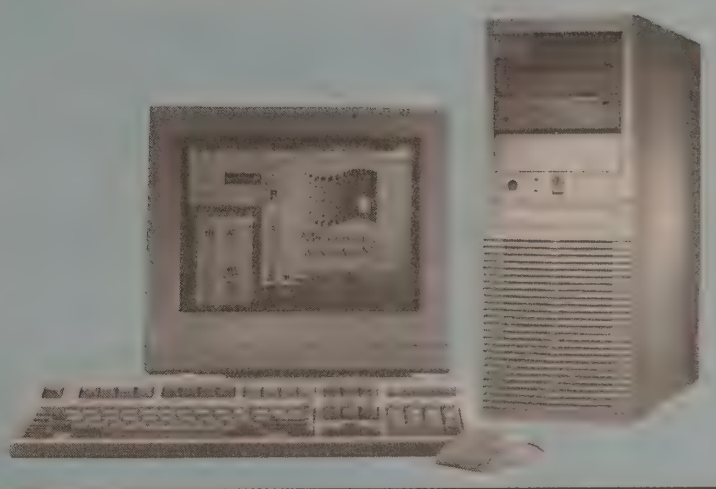
- 486 DX2-66 Mhz CPU
- 256K Cache, 2 Local Bus/7 ISA Slots
- 4MB RAM up to 32MB
- 1.44MB Floppy Drives
- 560MB Hard Drive
- VESA Local Bus IDE/FDD Controller w/2S, 1P
- VESA Local Bus SVGA Card w/1MB
- 14" SVGA NI Monitor .28 Dot
- 101 Enhanced Keyboard
- Serial Mouse w/Pad
- Mid Tower Case w/230w PS

**$1055**

## 386DX 40

- 386 DX-40 Mhz CPU
- 256K Cache, 8 ISA Slots
- 4MB RAM up to 32MB
- 1.2 & 1.44MB Floppy Drives
- 250MB Hard Drive
- IDE/FDD Controller w/2S, 1P
- SVGA Card w/1MB
- 14" SVGA NI Monitor .28 Dot
- 101 Enhanced Keyboard
- Serial Mouse w/Pad
- Mini Tower Case w/230w PS

**$850**

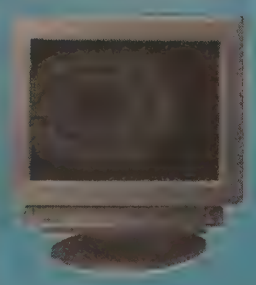


## TROGON

**PCMCIA** Special!

- .....$105
- .....$135
- .....$145
- .....$290
- .....$189

## TATUNG



**CM-17MLP**

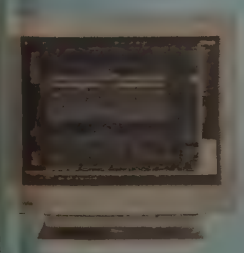
- 1280 x 1024/.26mm (N.I.)
- 1024 x 768 at 75Hz Refresh
- MPR II Low Radiation
- Multi-sync EPA
- Invar Shadow Mask
- Flat Screen

**$629**

**CM-17MCR**

- 1280 x 1024/.28mm (N.I.)
- 1024 x 768 at 75Hz Refresh
- Digital Control
- Multi-sync
- Dynamic Focus
- Flat Screen

**$589**



**CM-15VBE**

- 1024 x 768/.28mm (N.I.) at 75Hz Refresh
- Digital Control
- Low Emission
- EPA,Flat
- Speaker Built-in

**$335**

**CM-14UAE**

- 1024 x 768/.28mm (N.I.) at 60Hz Refresh
- Low Emission
- EPA

**$225**

Protect Your PC Investment

We Offer... **4 Year** On-Site Service Contract GE Consumer Service

TROGON

TATUNG Authorized Dealer

Canon Authorized Dealer

Optiquest

NANAO Authorized Dealer

3 YEARS LABOR WARRANTY 1 YEAR PARTS TCC

*The* CALIFORNIA COMPUTER

*950 E. Colorado Blvd. Suite #102, Pasadena, CA 91106*

*Hours: Mon-Fri, 9:30-6:00PM ; Sat, 10AM-5PM*

**818-568-1122**

**Fax: 818-568-1515**

MasterCard VISA Financing Available

All brand names are trademarks of their respective companies. Prices quoted base on 3% cash discount. Prices and specifications are subject to change without notice. TCC is not responsible for typographical or photographical errors. Financing are subject to credit approval

**Ask About our GE 3 Years Extended Warranty and 90 Day Same as Cash Financing Program**

April 22-23 April 22-23

The Biggest Computer Show Of The Year
is Coming To The

## Los Angeles Convention Center

# Computer & Electronics EXPO '95

Over 500 Vendor & Manufacturer Exhibit Booths

**Free Seminars Every Hour On The Hour!**

MULTIMEDIA, INTERNET, HOME OFFICE SEMINARS
Network Professional Association "Hands-On Internet Connectivity Demo's"
Telecomputing, Home ISDN & Modem Seminars
WordPerfect/Novell Home Office Applications
What Is The Internet & How To Use It
Fax Systems & Printers Seminars
LAN Distance Seminars By IBM
OS/2 Warp Seminars By IBM

PACIFIC BELL IBM hp Apple

ALL SEMINARS FREE WITH PAID ADMISSION!

## State Of The Art MAC & PC Computer Equipment Below Wholesale Prices!

Adults $6.50
Seniors $5.00
Children Under 12 Free!

Free Drawings!

Win A Multimedia Computer Each Day!

**For Vendor Registration Or More Info Call**

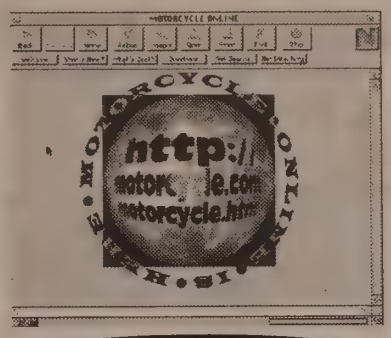
**(805) 491-2183**

Sponsored In Part By:
CELLULAR MOBILE PHONE COMPANY

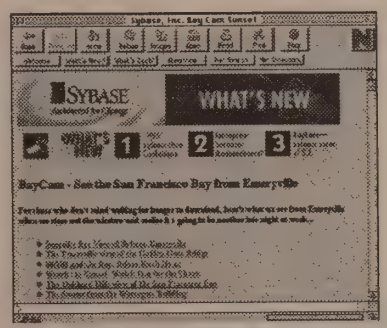
Sponsored In Part By:
MICROTIMES

# Web Page Listings

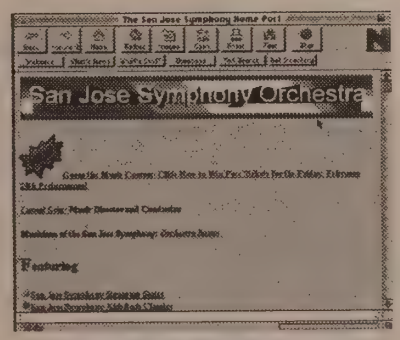
Looking for beaches to Netsurf? Announcing MicroTimes' new listing of World Wide Web pages. Herewith is an assortment of cool, interesting, and informative Web sites to tickle your fancy and stimulate your mind.




MOTORCYCLE ONLINE




SYBASE BayCam




SAN JOSE SYMPHONY

### 3Com Corporation on the Web

*http://www.3com.com* New product and service information from 3Com, featuring information on adapters, hubs, and internetworking products. [Exp. #139.]

### Aimnet Corporation

*http://www.aimnet.com* Prices and services for Aimnet, an ISP for the Bay Area and Silicon Valley. [Exp. #139.]

### Azule of Saratoga, Florist

*http://www.portal.com/~jdoll/joes/azule* Say it with flowers! Order direct via the Net. We ship by wire worldwide. [Exp. #139.]

### BahnWare

*http://www.bahnware.com/bahnware* BahnWare develops WWW solutions for business marketing, distributed engineering, and personal use. Magellan GPS Systems WWW site. [Exp. #139.]

### Best Internet Communications, Inc

*http://www.best.com* Internet service provider information. [Exp. #138.]

### Bob Bickford's Home Page

*http://www.well.com/Community/rab/index.html* The still-evolving home page of Bob Bickford, Professional Wild-Eyed Visionary. [Exp. #138.]

### The California Libertarian Party

*http://www.lp.org/lp/ca/lpc.html* [Exp. #138.]

### Career Taxi

http://www.iquest.net/Career_Taxi/taxi.html A forum for the hottest companies to present their home pages and their employment opportunities. [Exp. #139.]

### Coolware's Place on the Internet

*http://none.coolware.com/* Coolware hosts Good Medicine Magazine and the electronic Job Guide. [Exp. #138.]

### Cool Web Page

*http://www.aimnet.com/hia/pcr/home.html* For thought-provoking content. [Exp. #139.]

### The electronic Gourmet Guide

*http://www.deltanet.com/2way/egg The eGG* is the Internet's first full-color food magazine featuring interviews, articles, recipes, columns, news, and links. [Exp. #138.]

### First Virtual

*http://www.fv.com/access/by-seller/Internet_Info* "New on the Net" report: includes all noteworthy registrations of commercial domains registered with InterNIC. [Exp. #138.]

### Flash Sheridan's Newton Software

*http://www.rahul.net/flasheridn/* Newton Register allows users to pay for shareware via email. Disabler is a startup manager. [Exp. #139.]

### Focus on Africa

*http://login.eunet.no/~presno/sample4.html* Connectivity issues, sources of information about Africa for various application (news, Web, and gopher servers). [Exp. #138.]

### Future New$

*http://futurenews.com/wall-street* Newsstand focused exclusively on forecasting Wall Street and global financial markets. [Exp. #138.]

### GolfWeb

*http://www.golfweb.com* Complete source for everything related to golf on the WWW: results, statistics, live reporting, course information, more. [Exp. #139.]

### Hawaii Made Easy!

*http://www.aloha.com/~optunehi* Learn about one of the healthiest states, and one of the safest. Many businesses and jobs. [Exp. #139.]

## FREE WEB LISTINGS!*

**Take this opportunity to list your Web home page *FREE*. Just fill out this form and mail it to *Web Listing, 3470 Buskirk Ave., Pleasant Hill, CA 94523; fax to (510)934-3958; email to* microx@well.com .**

Home page name: _____

URL (address): _____

15-word description: _____

_____

**Please give a contact name and voice phone number or email address, for internal purposes only:**

Contact name: _____

Phone number: _____

email address: _____

* EDITORS RESERVE THE RIGHT TO SELECT LISTINGS ON A SPACE AVAILABLE BASIS AND EDIT THOSE LISTINGS AS NEEDED.

# MIPS' COMPUTER
## *Your ultimate choice!*

**MONTHLY SPECIAL!**
**PCI Super DEAL**

- Intel CPU, ZIF Socket, Green Motherboard
- 256K Cache, w/PCI, VLB & ISA Slots
- 8MB RAM, 70ns (exp. to 128MB)
- 1.44MB 3.5" TEAC Floppy
- 425MB IDE Hard Drive
- 2 Serial, 1 Parallel, 1 Game
- PCI IDE Controller
- PCI, Diamond or ATI w/1MB, Max. 16M Color, 1280 x 1024 Res
- 14" Non-Interlaced SVGA .28dp Green
- 101 Enhanced Keyboard
- Digital Medium Tower w/230PS
- FREE Microsoft Compatible Mouse

PCI 486DX2-66....$1199
PCI Pentium 66....$1595
PCI Pentium-90 ...$1695

**INTEL 486DX**
**VESA Local Bus**

- Intel CPU
- 3VL Bus, ZIF, Green Motherboard
- Built-in 80487 Math Co-Processor
- CPU Cooling Fan w/Heatsink
- 256K Cache, AMI BIOS
- 4MB RAM, 70ns (Exp. to 128MB)
- 1.44MB 3.5" TEAC Floppy
- 425 MB IDE Hard Drive
- 2 Serial, 1 Parallel, 1 Game
- 32 Bit Local Bus IDE Controller
- 32 Bit Local Bus Video w/1MB (Exp. to 2MB) (Resolution up to 1280 x 1024)
- 14" Non-Interlaced SVGA .28dp LR
- 101 Enhanced Keyboard
- Digital Medium Tower w/230PS

VL486DX-33 .....$895
VL486DX2-66 .....$955

**Intel PENTIUM**
**PCI SuperFAST**

- Intel CPU, Zif Socket, Green Motherboard
- 256K Cache, w/PCI, VLB & ISA Slots
- Built-in Math Co-Processor
- 8MB RAM, 70ns (Exp. to 128MB)
- 1.44MB 3.5" TEAC Floppy
- 540MB SCSI-2 Fast Hard Drive
- 2 Serial, 1 Parallel, 1 Game Port
- PCI SCSI-2 Controller
- PCI, Diamond or ATI w/1MB, Max. 16M Color, 1280 x 1024 Res
- 15" Non-Interlaced SVGA .28dp Digital
- 101 Enhanced Keyboard
- Digital Medium Tower w/230PS

PCI 486DX2-66 .....$1399
PCI Pentium-66 .....$1795
PCI Pentium-90 .....$1895

**ULTIMATE PCI**

- Intel CPU, ZIF Socket, Green Board
- 256K Cache w/PCI, VLB & ISA Slots
- Built-in Math Co-Processor
- 16MB RAM, 70ns (Exp. to 128MB)
- 1.2MB & 1.44MB TEAC Floppy
- 1GB SCSI - 2 Fast Hard Drive
- 2 Serial, 1 Parallel, 1 Game Port
- PCI, Adaptec 2940 SCSI Controller
- PCI, D / Stealth - 64 Bit 2MB VRAM, Max. 16M Color, 1280x1024 Res.
- 17" (MAG) MX17FG .26 SVGA
- Focus 2001 Keyboard
- Digital Full Tower w/250PS
- FREE** Microsoft Serial Mouse

PCI 486DX2-66 .....$2745
PCI Pentium-66 .....$3145
PCI Pentium-90 .....$3245

Prices subject to change without notice. Not responsible for typographical errors.

**UPGRADES**

| | |
|---|---|
| 8MB (Total) from 4MB | $140 |
| 16MB (Total) from 4MB | $345 |
| 540MB from 425MB | $40 |
| 15" NI .28dp from 14" | $95 |
| Fax/Modem (14400) | $55 |
| 250MB Tape Backup Drive | $155 |

**MULTIMEDIA UPGRADE KIT**

| | |
|---|---|
| 2X Panasonic Package (MCD Sound Card, 12 CD Titles, Speakers) | $245 |
| 3X NEC 510 SCSI-2 | $475 |
| 4X Toshiba 3501B SCSI-2 | $595 |

**(909) 468-9622**

**WARRANTY...One Year parts and labor.**

**TERMS and CONDITIONS**

- 15 Day Money Back Guarantee with 15% Restocking Fee.
- 72 Hours Burn-in Tested.
- All Brand New Parts.
- Prices & Specifications Subject to Change Without Notice.
- Prices shown are Based on 3% Cash Discount.
- Shipping & Handling Fee are Not Refundable.
- Dealer and Consultant Inquiries Welcome.
- All Software Sales are Final.
- Not Responsible for Typographical Errors.
- We Accept Government & University P.O.'s.

**COMPONENTS**

| | |
|---|---|
| ***Memory:*** | |
| 1MB SIMM, 70ns | $40 |
| 4MB SIMM, 70ns | $145 |
| ***Vesa Local Bus Motherboard:*** | |
| 256K Cache, 3VLB, ZIF, Green, AMI BIOS | |
| • board only w/o CPU | $90 |
| • with Intel 486DX-33 | $215 |
| • with Intel 486DX2-66 | $275 |
| PCI, 486DX2-66 Intel CPU | $335 |
| PCI, Pentium 66 Intel CPU | $715 |
| PCI, Pentium 90 Intel CPU | $800 |
| PCI/VLB IDE + IO | $25/$15 |
| PCI/VLB Windows Acc. w/1MB | $95/$55 |
| ***Hard & Floppy Drives:*** | |
| TEAC 1.2MB 5.25"/1.44MB 3.5" | $45/$35 |
| 250MB/425MB IDE Hard Drive | $155/$185 |
| 540MB/1GB IDE Hard Drive | $225/$435 |
| 270MB/540MB SCSI Hard Drive | $195/$255 |
| 1GB/2GB SCSI Hard Drive | $535/$995 |

**MIPSystem, Inc.**
*QUALITY COMPUTER PRODUCTS & SUPPORT*
304 S. Lemon Ave.
Walnut, CA 91789
Tel: (909) 468-9622 Fax: (909) 468-9313
Hours: Monday-Friday 9:00-5:30


# Online Guide

## WEB LISTINGS *continued...*

**THE HONG KONG BUSINESS DIRECTORY**
*http://FarEast.Com/HongKong/directory. html* Source products, find manufacturers, locate importers and exporters, find hotels, services, suppliers, buyers, even individuals in Hong Kong. [Exp. #138.]

**HOOKED**
*http://www.hooked.net* Hooked is an Internet service provider using the amazing Internaut software. [Exp. #139.]

**IMAGO DEI**
*http://www.art.net/Studios/jaxun/homepage.html* An all-digital incarnation of one computer support tech's emerging Muse... [Exp. #139.]

**INFOLINK INFORMATION CENTER**
*http://www.infolink.net/* Fastest-growing Internet service provider in Hong Kong. See how to get connected in Hong Kong. [Exp. #139.]

**INFOWERKS**
*http://www.best.com/infowerk/* Cool students/Web consultants page, artistic, interesting connections. [Exp. #139.]

**THE INSTITUTE FOR GLOBAL COMMUNICATIONS PROGRESSIVE DIRECTORY**
*http://www.igc.apc.org* [Exp. #138.]

**INTERNAL REVENUE SERVICE**
*http://www.ustreas.gov/treasury/bureaus/irs/irs.html* Provides tax forms, answers to frequently asked questions, where to get more help, and where to file. [Exp. #139.]

**INTERNET LITERACY CONSULTANTS**
*http://www.matisse.net* We help people understand and use the Internet and related technologies to accomplish their goals, via seminars and consulting. [Exp. #139.]

**INTERNET ROUNDTABLE SOCIETY**
*http://www.IRSociety.com* Providers of business WWW services: home pages, promotion, etc. [Exp. #139.]

**INTERNEX INFORMATION SERVICES**
*http://www.internex.net* Premier Internet service provider; high speed (ISDN, frame relay, WWW server). [Exp. #139.]

**INTERNOTES**
*http://www.tbo.com/notes.html* [Exp. #138.]

**JAPANESE UNDERGROUND TECHNOLOGY**
*ftp://ftp.netcom.com/pub/ge/geoi310/homepage/a6.html* [Exp. #139.]

**JOHN PERRY'S HOME PAGE**
*http://www.perry.com/* I'm B1FF!!! (a film festival), The Liberal Materialists (my band), photos, poetry, and much more. [Exp. #139.]

**THE LIBERTARIAN PARTY, AMERICA'S THIRD PARTY**
*http://www.lp.org/lp/* [Exp. #138.]

**MAKIN' WAVES STUDIO**
*http://cyberzine.org/html/Waves/wavepage.html* Aussie-style humor abounds, complete with free .wav sound files for download. Commercial enquiries welcome. [Exp. #138.]

**MEXICO OUT OF BALANCE**
*http://www.igc.apc.org/nacla/mexico.html* Hard-to-find, in-depth information and analysis concerning political, economic, labor, and trade issues in Mexico. [Exp. #138.]

**MODULUS GRAPHITE**
*http://www.dnai.com/~modulus* Catalog of high-end basses and guitars. [Exp. #138.]

**MOTORCYCLE ONLINE**
*http://motorcycle.com/motorcycle.html* Anything and everything to do with motorcycles. [Exp. #139.]

**NETBIZ**
*http://204.188.129.1/NetBiz/netbiz.html* Your advertising gateway to the Internet. Home pages and online advertising worldwide. [Exp. #139.]

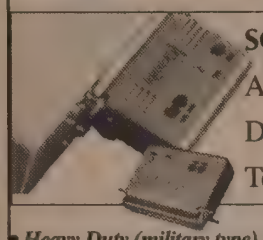
**THE NORTH POLE**
*http://northpole.net* Browse the North Pole; read messages from Santa, his elves, the reindeer; North Pole weather reports. [Exp. #138.]

**THE OMEGA TRANSMISSIONS—A TECHNO-THRILLER**
*http://one.mind.net/omega/index.html* An action-packed adventure about NASA's SETI project (Search for Extraterrestrial Intelligence). [Exp. #139.]

**OPENMARKET**
*http://directory.net/netinfo* "New on the Net" report: includes all noteworthy registrations of commercial domains registered with InterNIC [Exp. #138.]

**QUOTECOM**
*http://www.quote.com/* Stock quotes business news, financial market data for investors. [Exp. #139.]

# We Fix SCSI Problems And Improve SCSI Performance

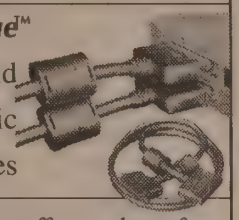


**SCSI*Vue*™ Active Diagnostic Terminator**

- *Active Termination Increases Reliability*
- *Provides Regulated SCSI Voltage*
- *Automatically Adjusts As SCSI Changes*
- *Matches Cable Impedance Needs*
- *Gold Connectors Reduce Noise*
- *LEDs Diagnose SCSI Problems*

- *Heavy Duty (military type) Cable Construction*
- *Provides Best Impedence Match*
- *Foil, Braid, Ferrite Shielding Reduces Noise*
- *Data Transfers Are Dramatically Improved*
- *LED Provides Diagnostic Ability*
- *Reduces SCSI Retries and SCSI Errors*

**SCSI*Vue*™ Gold Diagnostic Cables**



The quality of your SCSI Cables and Terminators has a direct effect on the performance and reliability of any SCSI bus. Using inexpensive "PASSIVE TYPE" Terminators and "UN-SHIELDED" Cables can cause many problems. Granite Digital has introduced the **SCSI*Vue*** line of **Active Diagnostic Terminators** and **Gold Diagnostic Cables** to eliminate SCSI problems and to improve SCSI performance.

The **SCSI*Vue* Active Diagnostic Terminator** is not only the best Active Terminator you can find, but also a SCSI analyzer. The **SCSI*Vue* Gold Diagnostic Cables** are exclusively designed to provide the maximum protection available to the SCSI bus.

**SCSI *Vue* Terminator**
*Centronics 50 . . . . . 59*
*MicroD 50 . . . . . 79*
*MicroD 68 . . . . . 99*
*MicroD 68 Diff. . . . . 99*

Granite D•I•G•I•T•A•L

**SCSI *Vue* Gold Cables**
*25 Apple / 50 Cent.*
*2'/6' . . . . . 49 / 59*
*50 / 50 Centronics*
*18"/3'/6' . . . . 59 / 69 / 79*
*50 Cent. / 50 MicroD*
*3'/6' . . . . . 89 / 109*
*50 / 50 MicroD*
*18"/3'/6' . . . 79 / 89 / 109*
*68 / 68 MicroD*
*18"/3'/6' . 129 / 139 / 159*

**Quantity & Dealer Discounts Available**

SCSI

*Phone 510-471-6442* *Fax 510-471-6267*
*Granite Digital • 3101 Whipple Road • Union City, Ca. 94587*

# UNITEK
## Encino
# ANNOUNCES
## FULL LINE DEALER
## MUSIC & WRITERS
## SOFTWARE

MARK OF UNICORN • PERFORMER
UNISYN • MOSAIC • FREESTYLE
OPCODE SYSTEMS • STEINBERG
JONES • FINAL DRAFT • SCRIPTOR
SCRIPT WIZARD • BUDGETING
MOVIE MAGIC • SCHEDULING
DRAMATICA • CORKBOARD

UNITEK™ computer stores

**W. LOS ANGELES**
12024 Wilshire Blvd.
West Los Angeles, CA 90025
**310.820.2400**
Fax 310.826.1455

**ENCINO**
16027 Ventura Blvd.
Encino, CA 91436
**818.907.7878**
Fax 818.907.7799

# FREE Novell Training (and more)

The Mt. Sierra College Certified Novell Engineer (CNE) program helps you start your career with:

- **FREE courses** - *DOS for NetWare Users* (Novell #1100), *Microcomputer Concepts for NetWare Users* (Novell #1101), & *PC Technology* (CNT-110).
- **FREE Novell NetWare®**, two-user version.
- **FREE computer lab** open 7 days a week.
- **FREE review sessions** and extra study help.
- **FREE assessment tests** for Novel certification.
- **FREE job placement** and career services.
- **1:1 student-to-work-station ratio.**
- **Day, evening, and weekend classes** taught by Certified Novell Instructors (CNIs).

Call now to reserve your place in our April classes.

## (800) 240-2500 ext. 309

**(818) 351-9995 ext. 309**

Mt. Sierra College
350 N. Halstead Street
Pasadena, CA 91107

Novell Authorized Education Center

# NOVA SOFTWARE

## ON SALE THIS MONTH!!!

| | | | |
|---|---|---|---|
| Borland C+ +4.0 | $150 | MS Word for Mac 5.1 | $75 |
| Borland C+ +3.1 | $99 | OS/2 2.1 | $25 |
| Borland Pascal 7.0 | $75 | MS Works 3.0 CD | $49 |
| PhotoFinish 2.0 | $45 | MS Excel 4.0 | $69 |
| Labels for Windows | $15 | Generic Cadd 6.1 | $99 |

## 20 DOLLAR BLOWOUT

Family Reunion • Privateer • Protostar • Blue Force
• Qemm 6.01 • Mantis CdRom • KeyFonts • More Lemmings
• CyberRace • C.P. AntiVirus • Mavis Teaches Typing • Labels!
• F-15 Strike III • Terminator 2029 • Jump Jet

10% OFF any Purchase with this ad

**LOTS LOTS MORE!!!**
**$15 and $5 Software Titles too!**
Prices include coupon discount.

**LARGE SELECTION OF MAC TITLES**
**New MAC-CD-ROM Section!**

3537 Torrance Blvd., Torrance, CA • (310)543-0053
**1 BLOCK EAST OF HAWTHORNE** **OPEN DAILY NOON - 7PM**

**Call for Best Pricing**
**We Ship UPS**
**Master Card/Visa**
**Discover/American Express**
**Dealer Inquiries Welcome!**

**We Will Beat Any Price on Any In Stock Item**

# INTERNET

**COMPUTER BASED TRAINING PROGRAM !!**

*Eliminate the need for frequent and expensive support calls. LanTec's Computer Based Training package covers everything you'll need to know to "get on line."*

- *Step-by-step tutorials designed to teach you how to use various utilities without the cost of being "on-line."*
- *Install and configure your Internet connection yourself*
- *Cruise the "Net" for information, software - even new customers or employers !*
- *Full coverage of basic data communication concepts*

**$79**

VISIT YOUR NEAREST SOFTWARE STORE OR CALL LANTEC TO PLACE YOU ORDER !

LANTEC

2285 ST. LAURENT BLVD. D-12 OTTAWA ONT. K1G 4Z7
PH: (613) 736-5326 FAX: (613) 736-9614



## One-Off CD-ROMs

From your tape backup, we will create a custom CD-ROM of your data in just 24 hours.

## OCR

Our prices are the best around, and our complete OCR service can't be beat. Plus, we have just upgraded our OCR service with the addition of a high speed scanner and two of the top OCR packages currently available.

**CD-Dossier DATA SOLUTIONS**
135 N. Pacific Coast Hwy.
Redondo Beach, CA 90277
V: 310-372-7890 F:310-372-4150
E-Mail CDDOSSIER@AOL.COM


# Online Guide

## WEB LISTINGS *continued...*

**RANDY KSAR'S HOME PAGE**
*http://www.mvhs.edu/~rksar* Gives links and documents to those in need of a quick overview of the Web. Also offers Web services. [Exp. #138.]

**THE SAN FRANCISCO NETWORK**
*http://www.SFnet* Growing collection of Bay Area databases and newsletters including restaurants, wineries, entertainment, and commercial locations. [Exp. #138.]

**SAN JOSE SYMPHONY HOME PORT**
*http://webcom.com/~sjsympho/* Meet Maestro Leonid Grin and the 89 musicians of the San Jose Symphony. [Exp. #139.]

**SAN MATEO TIMES**
*http://www.baynet.com/smtimes/index.html* San Mateo County's only daily newspaper. [Exp. #139.]

**SENSATIONAL SEMINARS**
*http://www.onramp.net/sensational* Sensational Seminars, Inc. "We Make Education An Experience" presents "Hollywood In Cyberspace" Monday, April 3, in LA. [Exp. #139.]

**THE SHAW FESTIVAL**
*http://www.cyberplex.com/CyberPlex/Arts/Shaw/Shaw.html* Information about shows currently being performed by the only company that specializes in plays written during G.B. Shaw's lifetime. [Exp. #138.]

**THE SRMC SPIDER WEB**
*http://sweb.srmc.com/* Full-service ISP-WWW, 28.8, ISDN through T-1, as well as on-site support and maintenance. [Exp. #139.]

**STAR TREK: VOYAGER**
*http://voyager.paramount.com* Latest Web site by Paramount promotes new Star Trek show and connects studio with the fans. [Exp. #138.]

**STOWE MOUNTAIN RESORT**
*http://www.together.com/sms/stowe* Photos, weather maps, snow condition reports, press releases, lodging information, insider's guides, and special offers. [Exp. #139.]

**SYBASE HOME PAGE**
*http://www.sybase.com* Info on products and services; views of the San Francisco Bay by clicking on BayCam button. [Exp. #139.]

**TECNATION DIGITAL WORLD**
*http://www.tecnation.com/tecnation/* Tecnation Digital World's online presence. Read about our innovative products and creative services. [Exp. #139.]

**THINGS I'D LIKE TO SEE IN CYBERSPACE**
*http://www.clark.net/pub/journalism/wishes.html* A simple home page to collect the thoughts and wishes of those using the Internet. [Exp. #139.]

**THOMAS**
*http://thomas.loc.gov* US House of Representatives: full text of all bills of 103rd Congress, email addresses, more. [Exp. #139.]

**TIM HO**
*http://cad.ucla.edu:/~ho* A serialized comic strip about a PC computer mouse. [Exp. #139.]

**TV NET**
*http://tvnet.com/TVnet.html* TV Net provides information on broadcast/cable TV stations throughout the US and the world. [Exp. #138.]

**UNIFORM CAPITAL ACCESS NETWORK**
*http://www.ucan.com/ucan/* Offers investors and entrepreneurs the opportunity to explore business prospects. [Exp. #138.]

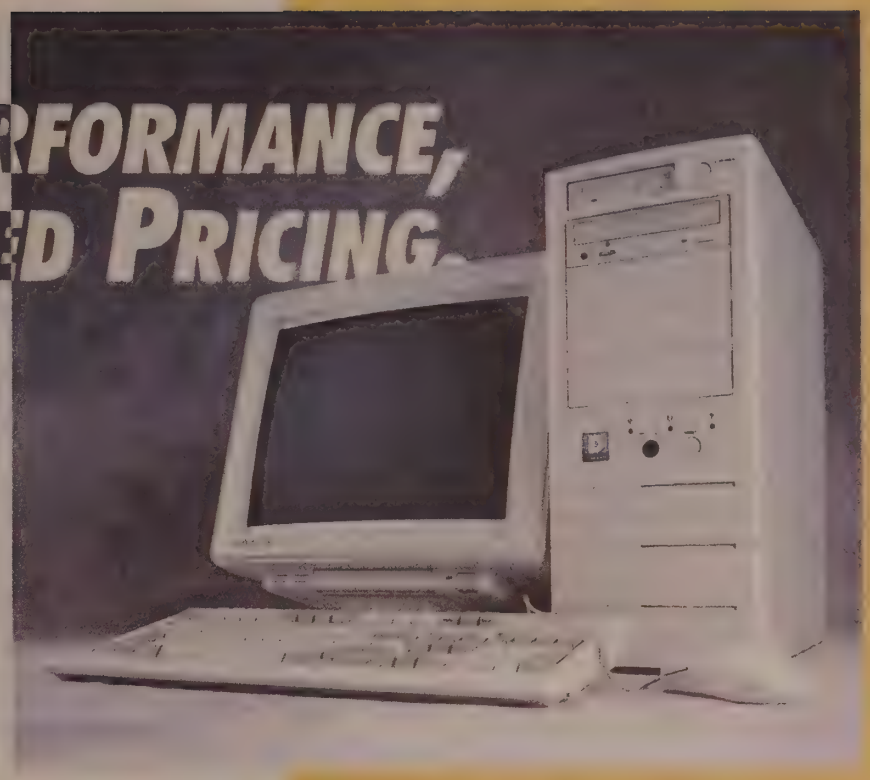
**VEGAN ACTION**
*http://www.umanitoba.ca/arrs/va/vegan_action.html* A nonprofit group providing information on vegan, animal-free diets and lifestyles. [Exp. #139.]

**W3-DESIGN**
*http://www.w3-design.com* Designers of World Wide Web sites. [Exp. #139.]

**WEBCHAT**
*http://www.IRSociety/WebChat.html* Real-time, multimedia chatting on the WWW. [Exp. #139.]

**WEB WORLD**
*http://204.188.129.1/webworld/netbiz.html* The World Wide Web home page directory lets Netsurfers easily find your home page. [Exp. #139.]

# Buy Advanced Performance, Get Reduced Pricing.



### Tools For Your Growing Business.

Change is inevitable. As your business evolves, you need more sophisticated tools. Your application software is now much more powerful. And your hardware should be too. Only Darwin offers you fully upgradeable systems made from top-of-the-line, brand name components at unbeatable prices.

**Acer View monitors.** 1994 *PC World* Best Buy Award.

**ADI *MicroScan* monitors.** New power management automatically switches to a low power state of less than 5 watts when not in use. *Byte Mag Award, 1/95.*

**Asus.** The performance leader with consistently highest test scores.

**Caviar and Panasonic drives.** This combination produces the fastest data transfer possible. *3 year warranty.*

**Paradise video cards.** Support the widest range of applications with guaranteed compatibility. *5 year warranty.*

**Sound Blaster.** Stereo sound from Creative Labs.

**UL approved power supplies.** For your safety.

### Advanced PCI Plug & Play.

Look for PCI local bus in all Darwin Systems. It assures you of maximum data transfer rates and expandability, including the auto configuration feature of Plug & Play that makes adding peripherals easy.

### Customize Your System.

It's easy. Just tell us what your needs are and we'll configure your custom system and price it right over the phone.

### The Darwin Promise of Satisfaction.

FREE **24 HR DARWIN EXPRESS EXCHANGE**
Should you ever have a problem that cannot be corrected through our on-site service during the first year, we will gladly ship you a brand new replacement system within 24 hours at no extra cost.

FREE **1 year on-site service**

FREE **Lifetime technical support**
Just call our toll-free number.

**30 day money-back guarantee**
No questions asked.

## Dual Pentium Power Plus

**Intel Pentium processor**
**Dual Pentium ready**
**Dual Pentium PCI / ISA motherboard**
16 MB RAM upgrade to 512MB, 512 K cache
**Adaptec 2940 SCSI PCI**
1.0 GB SCSI hard drive
Panasonic 1.44 floppy drive
**Toshiba Quad-speed CD-ROM drive**
**Paradise Barbados 64-bit PCI w/ 2 MB VRAM**
**17" ADI monitor .28**
Fujitsu keyboard
Microsoft mouse
MS DOS 6.22 & Windows for Workgrps 3.11
Mid-tower case w/ 250 watt UL / FCC
Hi-speed serial ports, ECP/EPP parallel ports

| | |
|---|---|
| ***Intel Pentium 90*** | ***$3895*** |
| ***Intel Pentium 100*** | ***$3950*** |

## Triton Pentium Pro

**Intel Pentium processor**
**Triton PCI / ISA motherboard, upgradeable to Pentium 150.**
16 MB RAM upgrade to 128MB, 256 K cache
**Caviar 1.2 GB Enhanced IDE hard drive**
Panasonic 1.44 floppy drive
**Paradise Bahamas 64-bit PCI w/ 2 MB DRAM**
**17" ADI monitor .28**
Fujitsu keyboard
Microsoft mouse
MS DOS 6.22 & Windows for Workgrps 3.11
Mid-tower case w/ 250 watt UL / FCC
Hi-speed serial ports, ECP/EPP parallel ports

| | |
|---|---|
| ***Intel Pentium 75*** | ***$2699*** |
| ***Intel Pentium 90*** | ***$3245*** |
| ***Intel Pentium 100*** | ***$3325*** |

## PCI Office Workstation

**486 PCI / ISA motherboard**
8 MB RAM upgrade to 128 MB, 256 K cache
**Caviar 540 MB Enhanced IDE hard drive**
Panasonic 1.44 floppy drive
**Paradise Bali 32-bit PCI w/ 1 MB DRAM**
14" Acer 34T monitor .28
Acer keyboard & Microsoft mouse
MS DOS 6.22 & Windows for Workgrps 3.11
Mini-tower case w/ 230 watt UL / FCC
Hi-speed serial ports, ECP/EPP parallel ports

| | |
|---|---|
| ~~***AMD 486-66***~~ | ~~***$1345***~~ |
| ***AMD 486-66*** | ***$1365*** |
| ***AMD 486 DX2-80*** | ***$1375*** |
| ***AMD 486 DX4-100*** | ***$1460*** |
| ***Intel 486-66*** | ***$1425*** |
| ***Intel 486 DX4-100*** | ***$1515*** |

### Corporate & Institutional Buyers.

Full financing is available.

Free delivery in Los Angeles and Orange counties.

### VARs & Resellers.

We offer volume discounts to help you better serve your clients.

## It's Easy To Upgrade Your New Darwin System.

| | | | |
|---|---|---|---|
| 14.4 Fax modem w/ voice | ***$68*** | Double-speed CD-ROM drive | ***$115*** |
| 28.8 Fax modem | ***$156*** | Quad-speed CD-ROM drive | ***$199*** |
| 420 MB tape back-up | ***$168*** | Sound Blaster 16-bit sound card | ***$83*** |
| *MS Office Professional* software | ***$369*** | 14 watt self-powered speakers | ***$29*** |
| Ethernet 10 BaseT network card | ***$33*** | 18 game & educational CD titles | ***$43*** |

**DARWIN MICRO SYSTEMS**

***Call now. It's toll-free.***

## 1-800-886-9888

***9:00 AM - 5:00 PM Monday - Friday***

Darwin Micro Systems
168 Old Ranch Road Industry CA 91789
Fax: 909-594-8602 E-Mail: Darwin@deltanet.com

Money back guarantee does not include shipping & opened software. All brands & product names are trademarks or registered trademarks of their respective owners. Prices & configurations are subject to change without notice

# We Have Your Computer Solution

## INTEL 486™ VESA LOCAL BUS MULTIMEDIA SYSTEM

**Intel 486™ Microprocessor**
14" SVGA .28 Non-Interlaced Color Monitor
8mb Ram & 560mb Hard Drive
Hi-Resolution Mouse & 101 Enhanced Keyboard
SVGA Graphics Card with 1mb

**CD ROM Bundle**
Creative Labs CD ROM
16bit Sound Card
15 CD Titles

| WIN MAX PLUS | WIN DELUXE 75 | WIN DELUXE 100 |
|---|---|---|
| 486 DX2-66 MHZ | 486 DX4-75 MHZ | 486 DX4-100 MHZ |
| $1395 | $1495 | $1595 |

## INTEL PENTIUM™ PROCESSOR BASE MULTIMEDIA SYSTEM

**Intel Pentium™ Microprocessor**
14" SVGA .28 Non-Interlaced Color Monitor
8mb Ram & 560mb Hard Drive
Hi-Resolution Mouse & 101 Enhanced Keyboard
PCI Local Bus SVGA Graphics Card with 1mb

**CD ROM Bundle**
Creative Labs CD ROM
16bit Sound Card
15 CD Titles

| WIN EXPRESS 75 | WIN EXPRESS 90 | WIN EXPRESS 100 |
|---|---|---|
| PENTIUM 75MHZ | PENTIUM 90MHZ | PENTIUM 100MHZ |
| $1795 | $2045 | $2195 |

intel inside

**Corporate & Educational PO's**
**310/948-2060**
Santa Fe Springs

**Large Volume Orders**
**310/949-0440**
Santa Fe Springs

**Retail Sales**
**818/356-0391**
Pasadena

**Retail Sales**
**818/965-7004**
Rowland Heights

NEW TECHNOLOGIES

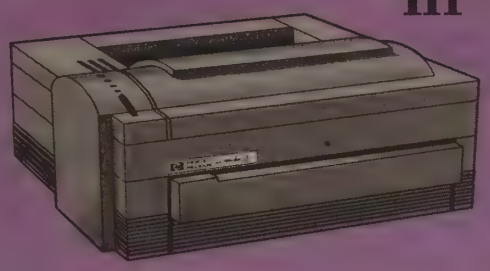
The Intel Inside and Pentium Processor Logos are trademarks of Intel Corporation. The monitor shown is a [illegible] SVGA Color Monitor.
Prices reflect a 3% cash discount. Prices expire 3/31/95

# Finally, A Way To Look Good On Paper

HEWLETT PACKARD

Authorized Reseller

## HP LaserJet 4L Printer



4ppm
Paper Tray
300x300 dpi
Up to three users
26 scalable fonts
Prints on envolpes

$495

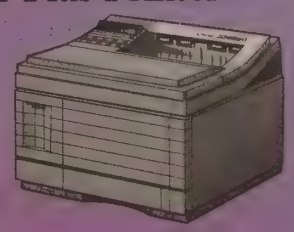
## HP DeskJet 320 Printer

3ppm
Optional Color
600x300 dpi

$275

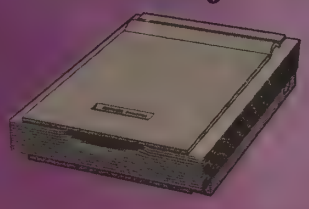
## HP LaserJet 4 Plus Printer

12ppm
6 Users
600x600 dpi



$1365

## HP ScanJet IIcx Scanner

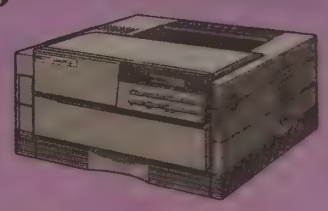


TWAIN & OCR
256 gray levels
Scans 1600 dpi

$750*

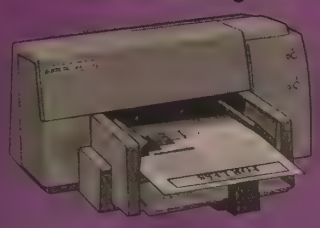
## HP LaserJet 4P Printer

4ppm
1 to 3 Users
600x600 dpi



$899

## HP DeskJet 540 Printer

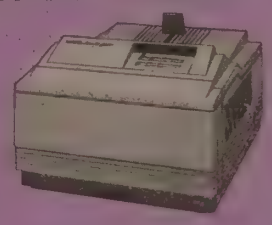


3ppm
Optional Color
600x300 dpi

$279

## HP LaserJet 4V Printer

16ppm
Up to 9 users
600x600 dpi



$1869

**Corporate & Educational PO's**
**310/948-2060**
Sante Fe Springs

**Retail Sales**
**818/356-0391**
Pasadena

**Large Volume Orders**
**310/949-0440**
Sante Fe Springs

**Retail Sales**
**818/965-7004**
Rowland Heights

NEW TECHNOLOGIES

Prices reflect a 3% cash discount. Prices expire 3/31/95. *Denotes price after HP rebate.

BY KEVIN M. SAVETZ

# Here Come The Knowbots!

**Although it sounds** like a character from a William Gibson novel, the concept of the "knowbot," an automated program that searches for information for you, is slowly becoming a reality on the Internet. Knowbots stand to change the face of research and information retrieval: Rather than spending hours searching for an electronic needle in a virtual haystack, why not let the information come to you?

I first wrote about a kind of knowbot last year in a *MicroTimes* article about the Stanford Netnews Filtering Service. It's a program that periodically searches the entire Usenet for the information you request and emails any "hits" back to you. (For information about it, send mail to *netnews@db.stanford.edu* with the word "help" in the message body.)

I'm happy to report that the concept and power of knowbots are expanding on the Net. The actual implementations of today's knowbots are decidedly less sexy than the futuristic-sounding self-replicating, auto-destructing knowbot defined above. And they still don't resemble the fancy animated "agents" that Apple Computer predicted in a futuristic promotional video a few years ago. Still, knowbots are very handy as automated news clipping services. Here we'll examine what you can do with two more knowbot utilities—another one from Stanford and one by the folks at *San Jose Mercury News*.

***knowbot:*** *an independent, self-acting computer program that seeks for information on behalf of a user, possibly replicating itself on other hosts on the network. As the knowbot performs its task, it sends reports back to the user, and self-destructs when it completes its task.*

—Internet in Plain English *by Bryan Pfaffenberger*

## Mercury Center NewsHound

The Mercury Center NewsHound is an easy-to-use news clipping service that offers the first low-cost news search agent aimed at consumers. NewsHound automatically searches the stories and classified ads in the *San Jose Mercury News* as well as hundreds of stories not published in the paper. Articles and ads matching your interests are sent directly to you via email.

Here's how it works: Once you sign up, you send a search request via email to the NewsHound program. Every hour or so, NewsHound checks to see if any of its recent news and ads match your request. It automatically sends the ones that do to you via electronic mail. I use the service to send me articles about online services, my favorite musicians, and ads for used computers. One might also use it to scope out editorials about Newt Gingrich, news about your home town, or ads for used Pintos.

Each request that you submit includes lists of "required" terms, "possible" ones, and "excluded" terms—phrases that you just don't want to hear about. The NewsHound uses a type of fuzzy logic to find the most relevant articles and advertisements. Essentially this involves counting the number of "possible" and "required" terms found in an article and then assigning the article a "selectivity" score. The score of an article ranges from 1 to 100. The higher the number, the more relevant the article.

NewsHound searches a variety of newsy databases in pursuit of your information needs, including the *San Jose Mercury News*, the *Chicago Tribune*, *Detroit Free Press*, *Miami Herald*, *Philadelphia Inquirer*, *The New York Times* News Service, The Associated Press, and PR Newswire as well as published and unpublished articles from sixty other sources, for a total of about two thousand articles each day.

NewsHound isn't free, but it's inexpensive enough to be affordable for just about everyone. The special rate for charter subscribers is $4.95 per month for up to five search profiles. That is a flat rate that applies regardless of the number of stories or ads delivered to your emailbox during the month. (The rate for noncharter subscribers will be $9.95 each month.)

To register to use NewsHound, call 1-800-818-NEWS or (408)297-8495. For

# KAMFOZ Computer

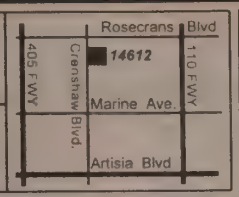
*All systems come with a one year warranty, extended support & service option available.* **Dealer inquires welcome**

*Not responsible for typo. All product names are trademarks of their respective companies.*

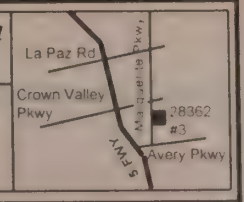
All prices are cash / check

VISA

**(310) 769-1970**
**Gardena**
**14612 Crenshaw Blvd.**
**Gardena, CA 90249**
**Fax (310) 523-9190**




**(714) 347-9563** (714) 347-9564
**Mission Viejo / Orange**
**28362 Marguerite Park Way Unit 3**
**Mission Viejo, CA 92691**
**Fax (714) 347-9565**
**(Next to LEXUS car showroom)**




Business Hours: Mon to Fri: 9am to 6pm
**SAT: 10am to 4pm**

## 466DX2-66 Computer W/Multimedia Super Package

- *486DX2-66 VLB Intel CPU w/256k cache
- *Over Drive ready ZIF Socket
- *3 VLB, 4 ISA slots, Green Feature AMI bios
- *4 MB Ram 70ns 72 pin
- *420 MB IDE Hard Drive
- *SVGA vlb 1MB Card 1024X768
- *AT I/O IDE Card VLB 2S 1P 1G 2HHD 2FDD
- *Mini Tower Case w/ps
- *1.2 & 1.4 Floppy Drive
- *101 BTC key board
- *SVGA N.I. .28 14" full screen monitor
- *Microsoft Compatible Mouse
- *Panasonic Double Speed CD Rom
- *16 Bit Stereo Multi CD Sound Card
- *4 watts Speakers
- *1 Encyclopedia CD Compton

*UL & FCC Class 2 Approved*

**$1199.00** W/Multimedia
**$999.00** System Only

## Special

**14" SVGA MONITOR**
**NI .28 1024 X 768**
**$180.00**

**MEDIAVISION 32 BIT VLB**
**2.25MB V RAM VIDEO CARD**
**$129.00**

## CPU

| | |
|---|---|
| *586-CPU* | |
| INTEL 586-90 Mhz CPU | $599.00 |
| INTEL 586-66 Mhz CPU | $219.00 |
| INTEL 586-60 Mhz CPU | $199.00 |
| *486-CPU* | |
| INTEL 486-DX4 100 MHZ | $275.00 |
| AMD 486-DX100 MHZ | $245.00 |
| AMD 486-DX80 MHZ | $169.00 |
| INTEL 486-66 DX2 | $169.00 |
| NTEL 486-DX33 | $149.00 |

## 586-90MHZ PENTIUM PCI / VLB

**$1699.00** W/O MONITOR

- *586-90MHZ OPTI CHIPSET 2VLB, 3PCI, 2 ISA
- 72PIN SIMMS SOCKET, ZIF SOCKET, 256K CACHE UPGRADE TO 512K 585-90 PENTIUM INTEL CPU
- *8 MB RAM 72 PIN 70NS
- *540 MB HD IDE
- *1.44 MB FDD
- *PCI AT I/O + IDE CARD 2S-1P-1G-2HDD-2FDD
- *PCI 64 BIT KELVIN 1MB CARD UPGRADE TO 2MB
- *KEYBOARD 101 B.T.C. ENHANCE
- *MINITOWER CASE W/P.S.
- *MICROSOFT COMPATIBLE MOUSE

## FAX / MODEM

| | |
|---|---|
| **9600/2400** Fax/Modem internal | $ 29.00 |
| **14,400** Fax/Modem internal | $ 59.00 |
| **9600/2400** Fax/Modem/Voicemail | $ 69.00 |
| **14,400** Fax/Modem/Voicemail | $ 79.00 |
| **14,400** Fax/Modem/voicemail/pager | $ 99.00 |
| **28.8** Fax/Modem internal | $139.00 |
| **14,400** Fax/Modem/external | $139.00 |
| **28,8** fax/Modem external | $169.00 |
| **14,400** fax/Modem PCMCIA | $130.00 |

## Special MONITORS SHAMROCK

*FULLSCREEN W/GREEN FEATURE*

| | |
|---|---|
| **14" SVGA 1024X768** .39 30-38KHZ | $189.00 |
| **14" SVGA 1024X768** .28NI 47-50KHZ | $215.00 |
| 1501 **15" SVGA 1280X1024** .28NI 24-64KHZ Non Digital | $279.00 |
| 1502 **15" SVGA 1280X1024** .28NI Micro Processor Control | $295.00 |
| 1502L **15" SVGA 1280X1024** .28NI Micro Processor Control/ Low Radiation | $320.00 |
| 1703 **17" SVGA 1280X1024** .28NI Digital 24-64KHZ / 47-104KHZ | $549.00 |
| 1702 **17" SVGA 1600X1280** .26NI Micro Processor Control (20 programable digital control memory) 24-82Khz 9pin D-Sub & 5 BNC | $649.00 |
| 1702L **17" SVGA 1600X1280** .26NI Micro Processor Control (20 programable digital control memory) 24-82 khz 9pin D-Sub & 5 BNC Low Radiation | $669.00 |
| 2002L **20" SVGA 1600X1280** .28NI Micro Processor Control | $1079.00 |
| 2102L **21" SVGA 1600X1280** .28NI 30khz-82khz 9pin D-Sub &5 BNC Connectors, Digital Control and with more other features | $1379.00 |

## ACCESSORIES

| | |
|---|---|
| MiniTower case w/ps 230w | $ 39.00 |
| MidCompact case w/ps | $ 55.00 |
| MidTower case w/ps 230w | $ 65.00 |
| Desktop case w/ps 230w | $ 49.00 |
| FullTower case w/ps 250w | $ 75.00 |
| 1.2 MB FD 5" 1/4 | $ 45.00 |
| 1.44 MB FD 3" 1/2 | $ 35.00 |
| Key Board 101BTC | $ 17.00 |
| Key Board Focus 2001 | $ 39.00 |
| Key Board Focus 8000 | $ 45.00 |
| Mouse Generic | $ 9.00 |
| Microsoft mouse 2 buttons | $ 39.00 |
| 420 MB Tape Backup Conner | $175.00 |
| 250 MB Tape Backup..." | $149.00 |

## NETWORK CARD

| | |
|---|---|
| NE-2000 2in1 16Bit | $ 39.00 |
| NE-2000 16bit PCMCIA.16 Bit | $149.00 |
| NE-2000 3in1 32Bit VESA | $ 86.00 |
| NE-2000 Pocket size 2in1 | $129.00 |

## VIDEO CARD

| | |
|---|---|
| ISA VGA 256K Video Card | $ 29.00 |
| ISA VGA 512K Video Card | $ 39.00 |
| ISA SVGA 1 MB Video Card | $ 59.00 |
| VLB SVGA 1 MB 1024X768 | $ 75.00 |
| VLB SVGA S3 Chip1024X768 | $ 85.00 |
| **Diamond Stealth 64 bit Video Card** | |
| **PCI /VLB D Ram 1MB** (upgradable to 2MB) | $139.00 |
| **PCI /VLB 2MB D Ram** | $179.00 |
| **PCI /VLB 2MB V Ram** (upgradable to 4MB) | $285.00 |
| **ATI GRAPHIC WIN TURBO 64 BIT** | |
| PCI/VLB 1MB DRam(upgradable to 2MB) | $135.00 |
| PCI/VLB 2MB DRam | $199.00 |
| PCI/VLB 2MB VRam (upgradable to 4MB) | $285.00 |
| VLB 32 BIT MEDIAVISION 2.25MB V RAM | $129.00 |

## I/O CARD

| | |
|---|---|
| 16bit AT I/O 2S,1P,1G | $ 13.00 |
| 16bit AT I/O & IDE 2S,1P,1G,2HDD,2FDD. | $ 15.00 |
| ISA 16550 HIGH SPEED I/O CARD | $ 29.00 |
| VLB AT I/O & IDE 2S,1P,1G,4HD,2FD enh | $ 25.00 |
| VLB AT I/O&IDE 16550 HI/SPD | $ 49.00 |
| VLB 6360 Adaptec SCSI card | $ 99.00 |
| Intel PCI IDE card w/cable | $ 39.00 |
| PCI SCSI NCR card | $ 99.00 |
| PCI IDE & I/O enhanced controller | $ 39.00 |
| PCI SCSI2 Adaptech AHA 2940 | $199.00 |
| SCSI ISA Controller Card | $ 65.00 |
| VLB IDE/FDD Caching Card (DC680T) | $139.00 |
| VLB SCSI/FDD Caching Card (800) | $385.00 |

## Multimedia kit — Super Deal

*Double speed CD Rom Panasonic, 16 bit MCD Stereo Sound card, 4 watts Speakers, 1 Encyclopedia CD.*

**$199.00**

## Sound Blaster Discovery 16

*Panasonic Double speed CD Rom, Sound Blaster16 Bit card, Microphone, 4+4 watts Speakers, 15 CD titles included microphone.*

**$239.00** — **$279.00** Digital School House

## CD ROM Drive

| | |
|---|---|
| Sony / Mitsumi double speed IDE | $119.00 |
| Panasonic double speed | $119.00 |
| Toshiba 4X speed SCSI | $285.00 |
| TEAC QUAD 4X AT | $199.00 |
| Mitsumi Quad speed 4X IDE | $199.00 |
| Sony/Mitsumi/Panasonic interface card | $ 15.00 |

## Sound Card

| | | |
|---|---|---|
| Sound Blaster 16 MCD | Creative | $ 89.00 |
| Sound Blaster 16 SCSI | Creative | $129.00 |
| Sound Blaster 32 BIT | Creative | $275.00 |
| 16 Bit MultiCD sound card by Opti chip | | $ 75.00 |
| SPEAKER NORMAL 2+2 Watts | | $ 12.00 |

**SOUND IMPRESSION *by BOCA***

*FAX / MODEM / VOICE MAIL 14,400 & 16 BIT STEREO MCD + IDE SOUND CARD ALL IN ONE* — **$179.00**

## Special HARD DRIVES

| | |
|---|---|
| **130MB IDE** *SEAGATE* | $ 99.00 |
| **240MB IDE** *SEAGATE* | $139.00 |
| **420MB IDE** *SAMSUNG* | $169.00 |
| **420MB IDE** *SEAGATE / CONNER* | $175.00 |
| **540MB IDE** *CONNER / QUANTUM* | $199.00 |
| **540MB IDE** *MAXTOR* | $229.00 |
| **730MB IDE** *QUANTUM* | $239.00 |
| **730MB IDE** *WESTERN DIGITAL* | $259.00 |
| **850MB IDE** *CONNER* | $269.00 |
| **850MB IDE** *MAXTOR* | $279.00 |
| **1.05 GB IDE** *SEAGATE* | $349.00 |
| **1.00 GB IDE** *WESTERN DIGITAL* | $379.00 |
| **1.2 GB IDE** *CONNER/MAXTOR* | $395.00 |
| **540MB SCSI** *QUANTUM* | $229.00 |
| **2.1GB SCSI** *QUANTUM* | $869.00 |
| **4.3GB SCSI** *QUANTUM* | $1589.00 |

## SIMMS MEMORY

*ALL MEMORIES ARE NAMEBRAND*

| | |
|---|---|
| 256 K SIMMS 80ns | $ 14.00 |
| 1Meg SIMMS 70ns 30 PNN 1X3 | $ 38.00 |
| 4Meg SIMMS 70ns 30 PIN 4X9 | $139.00 |
| 4Meg SIMMS 70ns 72pin 1X32 | $149.00 |
| 4Meg SIMMS 70ns 72pin 1X36 | $169.00 |
| 8Meg SIMMS 70ns 72pin 2X32 | $289.00 |
| 8Meg SIMMS70ns 72pin 2X36 | $299.00 |
| 16Meg SIMMS 70ns 72pin 4X32 | $429.00 |
| 16Meg SIMMS 70ns 72pin 4X36 | $469.00 |

## MOTHER BOARDS W/CPU

### 386-SX/DX

| | |
|---|---|
| **ISA 386-SX40** W/CPU | $ 59.00 |
| **ISA 386-DX40** 128K Cache W/CPU | $ 89.00 |

### 486-SLC & DLC

| | |
|---|---|
| **ISA 486-33SLC** TI CPU OK cache | $ 69.00 |
| **VLB 486-DLC 40 MHZ** w/CPU & w/128K Cache & Math CO | $157.00 |
| **ISA 486-DLC 40MHZ** W/CPU W/128K CACHE & Math Co | $139.00 |

### IBM SLC

| | |
|---|---|
| **VLB IBM 486-SLC 2 66mhz** 64K Cache w/ CPU Math CO | $ 149.00 |
| **VLB IBM 486-SLC 3 75mhz** 256K Cache w/ CPU Math CO VLB IDE I/O BUILT IN , ZIP SOCKET | $ 229.00 |

### 486-DX

| | |
|---|---|
| **VLB/PCI 486-DX2 66 W/ INTEL** CPU 256K Cache | $ 299.00 |
| **VLB 486-DX2-80 MHZ W/AMD CPU,** 256K Cache,zip socket | $ 279.00 |
| **486-DX66/50/33/40/25SX/DX VLB&ISA** 256K Cache, ZIP SOCKET, Green, Mother Board ONLY (Support DX-100mhz & 80mhz CPU) | $ 99.00 |

Special

**VLB 486-DX2 66 MHZ INTEL** CPU W / mother board, 3VLB, 256K Cache,Upgradable to 64 MB Ram, 30 pin& 72 pin,GREEN, Zip Socket — **$ 269.00**

### 586 DX PENTIUM

| | W/O CPU |
|---|---|
| **586-66 MHZ** ,4 PCI-2 ISA-2 VESA,AWARD BIOS, 256k cache ( upgradable to 512k cache), 72pin 4 slot | $ 229.00 |
| **586-66 MHZ** 3 VLB-5 ISA 256K Cache (upgradable to 512k),Award Bios | $ 179.00 |
| **586-90 MHZ** 2 VESA, 3 PCI, 2 ISA SLOTS 256K Cache (upgradable to 512K) 72 PIN 4 SLOTS | $ 266.00 |
| **586-90 MHZ INTEL NEPTUNE** Mother board,built in IDE+I/O, PCI+ISA slots. 256K cache *Original Intel Board* | $ 385.00 |
| **586-90 MHZ INTEL CHIP SET**, PCI & ISA, 256k CACHE (OEM BOARD) | $ 249.00 |

## PRINTERS

### HP *Inkjet/Laser/Scanner*

| | |
|---|---|
| HP540 | $ 289.00 |
| HP540C | $ 329.00 |
| HP560C | $ 469.00 |
| HP4P | $ 915.00 |
| HP4Plus | $1355.00 |
| HP4 | $1089.00 |
| HP4L | $ 499.00 |
| HP1200C | $ 989.00 |
| ScIICX | $ 899.00 |

### CANON *BUBLEJET*

| | |
|---|---|
| CANON BJC-600e | $469.00 |
| CANON BJ10SX | $255.00 |
| CANON BJ200e | $239.00 |
| CANON BJ230 wide | $399.00 |

### OKIDATA

| | |
|---|---|
| OL400 LED | $ 419.00 |
| OL400e LED | $ 519.00 |
| OL410e LED | $ 634.00 |
| OL810 LED | $ 919.00 |

### EPSON *LASER & DOT MATRIX*

| | |
|---|---|
| Action1100 | $399.00 |
| STYLUS-720color | $510.00 |
| STYLUS-800 | $225.00 |
| LX300 | $159.00 |
| FX870 | $299.00 |
| FX1170 | $389.00 |
| LQ570+ | $245.00 |
| LQ870 | $454.00 |
| LQ1070+ | $389.00 |
| Action1500 | $469.00 |

### PANASONIC *Laser & DOT MATRIX*

| | |
|---|---|
| KX-P1150 | $129.00 |
| KX-P2023 | $199.00 |
| KX-2130 | $210.00 |
| KX-P2135 color | $199.00 *After rebate* |

*Laser Printer*

| | |
|---|---|
| KX P4410 | $464.00 |
| KX P4400 | $345.00 |
| KX P5400 | $755.00 *After rebate* |

## 486 Soundbook

| 4 MB,340 MB | 9.5" Mono 64 grey | Dual Scan 10.3" Color | Active TFT 9.5" Color |
|---|---|---|---|
| 486SX-33 | $1349 | $1799 | $2449 |
| 486DX2-66 | $1449 | $1899 | $2549 |
| 486DX4-100 | $1549 | $1999 | $2649 |

* Intel 486 SL-enchanced CPU
* 128K cache
* 4 MB RAM (36 MB max)
* 1.44 MB floppy drive
* PCMCIA Type 4 slot
* Removable hard drive
* Built-in sound card, speaker and microphone
* 32-bit graphic accelerator
* 1 MB video memory
* Big 25mm trackball
* 2 NiMH battery w/hot swap
* Serial, parallel, kb, monitor, and docking station connector

* Intel PENTIUM processor
* 256K cache
* 8 MB RAM (40 MB max)
* 1.44 MB floppy drive
* PCMCIA Type 3 slot
* Removable hard drive
* Up to 810 MB disk space
* Built-in sound card, speaker and microphone
* 32-bit graphic accelerator
* 1 MB video memory
* Big 19mm trackball
* Serial, parallel, kb, monitor, and docking station connector

## Pentium Soundpro

| 8 MB,340 MB | Dual Scan 10.3" Color | Active TFT 9.5" Color |
|---|---|---|
| Pentium-75 | $2429 | $3129 |
| Pentium-90 | $2729 | $3429 |

## 486 Audiobook

| 4 MB,340 MB | 9.5" Mono 32 grey | Dual Scan 10.3" Color | Active TFT 9.5" Color |
|---|---|---|---|
| 486SX-33 | $1329 | $1829 | $2729 |
| 486DX2-66 | $1429 | $1929 | $2829 |
| 486DX4-100 | $1549 | $2049 | $2949 |

* Intel 486 SL-enchanced CPU
* 128K Flash ROM
* 4 MB RAM (20 MB max)
* 1.44 MB floppy drive
* PCMCIA Type 3 slot
* Built-in sound card, speaker and microphone
* 32-bit graphic accelerator
* 1 MB video memory
* Built-in 16mm trackball
* LCD status display
* Advanced power managemnt
* Serial, parallel, kb, monitor, and docking station connector

+ Mono does not include sound features

# TCC

1154 E. Colorado Blvd.
Pasadena, CA 91106

(818) 795-6112

Fax: (818) 795-6320

M - F 9 - 5:30

Your PC expert

Terms & Condition

All name brand & quality components

Friendly customer service

One year parts & two year labor warranty

30 Days Money Back Guarantee

## 486 2X Multimedia

| | |
|---|---|
| 486DX4-100 | $1379 |
| 486DX2-80 | $1299 |
| 486DX2-66 | $1289 |

- ☑ Intel pentium-overdrive ready
- ☑ CPU cooling fan w/heatsink
- ☑ 256K cache
- ☑ **8 MB RAM (128MB max.)** Cool
- ☑ TEAC 1.44 MB floppy drive
- ☑ **540 MB hard drive** Cool
- ☑ 32-bit Enchanced IDE HD controller
- ☑ 32-bit SVGA graphic accelerator w/1 MB
- ☑ **14" SVGA NI green monitor, .28dp**
- ☑ 2 serial, parallel, & game ports
- ☑ Enchanced 101 keyboard
- ☑ Mini tower case w/230W
- ☑ Microsoft compatible mouse

- ● **16-bit Sound blaster compatible card**
- ● **Double speed (2X) CD-ROM drive**
- ● **140W Hi-Fi power speakers** Cool

**DOS 6.22 & WFW 3.11 add $105**
**Encyclopedia etc. 14 Titles $45**
**MS Encarta 95, Works,Money, $75**
**Golf, Baseball, and more!**

## Pentium 4X Multimedia

| | |
|---|---|
| Pentium-100 | $2329 |
| Pentium-90 | $2249 |
| Pentium-75 | $1929 |

- ☑ CPU cooling fan w/heatsink
- ☑ 256K cache
- ☑ **8 MB RAM (128MB max.)** Cool
- ☑ TEAC 1.44 MB floppy drive
- ☑ **850 MB hard drive** Cool
- ☑ PCI Enchanced IDE HD controller
- ☑ **ATI Mach 64 w/2 MB** Cool
- ☑ **MAG 15" 1280 X 1024 NI monitor, .28dp**
- ☑ **Digital control, Low radiation (3 yr warranty)**
- ☑ 2 serial, parallel, & game ports Cool
- ☑ Enchanced 101 keyboard
- ☑ Medium tower case w/230W
- ☑ Microsoft compatible mouse

- ● **Sound Blaster 16**
- ● **Quad speed (4X) CD-ROM drive**
- ● **140W Hi-Fi power speakers** Cool

**DOS 6.22 & WFW 3.11 add $105**
**Encyclopedia etc. 14 Titles $45**
**MS Encarta 95, Works,Money, $75**
**Golf, Baseball, and more!**

## 486 VESA

| | |
|---|---|
| 486DX4-100 | $1069 |
| 486DX2-80 | $989 |
| 486DX2-66 | $979 |

- ☑ **INTEL pentium-overdrive ready**
- ☑ CPU cooling fan w/heatsink
- ☑ 256K cache
- ☑ **4 MB RAM (128MB max.)**
- ☑ TEAC 1.44 MB floppy drive
- ☑ **540 MB hard drive** Cool
- ☑ 32-bit Enchanced IDE HD controller
- ☑ 32-bit SVGA graphic accelerator w/1 MB
- ☑ **14" SVGA NI green monitor, .28dp**
- ☑ 2 serial, parallel, & game ports
- ☑ **Enchanced 101 keyboard**
- ☑ Mini tower case w/230W
- ☑ Microsoft compatible mouse

## Pentium PCI

| | |
|---|---|
| Pentium-100 | $1999 |
| Pentium-90 | $1919 |
| Pentium-75 | $1599 |

- ☑ CPU cooling fan w/heatsink
- ☑ 256K cache
- ☑ **8 MB RAM (128MB max.)**
- ☑ TEAC 1.44 MB floppy drive
- ☑ **850 MB hard drive** Cool
- ☑ PCI Enchanced IDE HD controller
- ☑ **ATI Mach 64 PCI w/1 MB** Cool
- ☑ **MAG 15" 1280 X 1024 NI monitor, .28dp**
- ☑ **Digital control, Low radiation (3 yr warranty)**
- ☑ 2 serial, parallel, & game ports
- ☑ **Enchanced 101 keyboard**
- ☑ Medium tower case w/230W
- ☑ Microsoft compatible mouse

## PARTS

**Case**

| | |
|---|---|
| Mini tower w/230W | $49 |
| Medium tower w/230W | $62 |
| Full tower w/250W | $95 |
| Desktop w/230W | $62 |

**CPU & Memory**
Please call for current pricing

**CD-ROM**

| | |
|---|---|
| Sony 2X IDE | $115 |
| Teac 4X | $199 |
| Mitsumi 4X IDE | $195 |
| Toshiba 4X SCSI | $299 |

**Fax/Modem**

| | |
|---|---|
| 14.4 internal | $59 |
| 14.4 internal w/Voice | $89 |
| 28.8 internal | $179 |

**Hard Drive**
Please call for current pricing

**Keyboard & Mouse**

| | |
|---|---|
| Water-resist | $20 |
| Fujitsu 4700 | $45 |
| Wireless mouse | $12 |
| Trackball | $22 |

**Monitor**

| | |
|---|---|
| Proton 14" NI .28 | $199 |
| MAG 15" DX-15F | $319 |
| MAG 17" DX-17F | $589 |

**Motherboard**

| | |
|---|---|
| 486 VLB | $105 |
| Pentium PCI | $175 |

**Sound Card**

| | |
|---|---|
| Sound Easy Pro 16 | $59 |
| Sound Blaster 16 | $79 |
| SB 16 SCSI-2 | $109 |
| SB AWE 32 | $289 |

**Speakers**

| | |
|---|---|
| 40 Watt | $30 |
| 140 Watt Hi-Fi | $50 |
| 160 Watt w/DSP | $65 |

**Video Card**

| | |
|---|---|
| ATI Mach 64 w/1M D | $149 |
| ATI Mach 64 w/2M D | $189 |
| ATI Mach 64 w/2M V | $289 |
| Stealth 64 w/1M D | $139 |
| Stealth 64 w/2M D | $179 |
| Stealth 64 w/2M V | $289 |

**Tape Drive**

| | |
|---|---|
| 250 MB w/tape | $145 |
| 420MB w/tape | $179 |
| 850MB | $289 |
| 350MB | $179 |

**Miscellaneous**

| | |
|---|---|
| Joysticks | from $15 |
| CD-Titles | from $4 |
| Power Center | $25 |
| Printers | Call |
| Cables | from $3 |

more information, send electronic mail to *newshound-support@sjmercury.com* .

## Computer Science Technical Report Service

As part of the DARPA Electronic Library Project, the Database Group at Stanford provides a free service to disseminate information about computer science technical reports. If you're a computer scientist, listen up. And if you're not, listen anyway; this will still give you an idea of the power of knowbots.

A user interested in receiving bibliographical records of technical reports available from the Math/Computer Science Library at Stanford submits their "interest profile" to the service. Periodically they will receive new information relevant to their interests via electronic mail.

Queries formed as plain English text (for example "high-speed fiber optics communication") are submitted via email. Abstracts of technical reports are returned based on their relevancy to your query. As new and relevant reports are added to the database, the knowbot will inform you. Some of them are available digitally—you can receive the full text with a simple emailed request. For others, you'll have to trek to your local library (or Stanford's) for the actual report. For more information about using the service, send email with the word "help" in the message body to *elib@db.stanford.edu* .

## What's Next?

Admittedly, computer science technical reports are pretty dry, and only of interest to a small group, but imagine what might be done with other databases running on knowbot servers. How about a recipe database, updated weekly, that automagically emails you vegetarian recipes featuring red potatoes or asparagus (but not beets)? Or an archive of *MicroTimes* articles that sends you everything mentioning Macintosh, except for stuff by that pesky John Dvorak?

Stay tuned. I predict those things (and more) are coming to the Internet, sooner or later.■

Copyright © 1995 by Kevin Savetz. All rights reserved.

### Example Of NewsHound Service

**To:** NewsHound@sjmercury.com
**Subject:** request
**create:** music
**search:** articles
**possible:** laurie anderson,negativland,they might be giants
**selectivity:** 20

**From:** NewsHound@sjmercury.com (NewsHound)
**To:** savetz@northcoast.com
**Subject:** Your NewsHound request
You now have 3 NewsHound profiles. Their attributes are:
**Title: INTERNET**
**Search:** articles
**Possible:** internet,on-line service,online service,worldwideweb,mosaic,compuserve,america online,eworld,prodigy
**Excluded:** information superhighway
**Selectivity:** 30

**Title:** MUSIC
**Search:** articles
**Possible:** laurie anderson,negativland,they might be giants
**Selectivity:** 20

**Title: SUN**
**Search:** ads
**Possible:** sun,sparc,sparcstation,unix,macintosh,mac
**Required:** for sale
**Selectivity:** 50 —

**From:** NewsHound@sjmercury.com (NewsHound)
**To:** savetz@northcoast.com
**Subject:** [30] STUDENT-RUN RADIO STATION A FIRST ON THE INTERNET
Selected by your NewsHound profile entitled "INTERNET". The selectivity score was 30 out of 100.
**Student-Run Radio Station a First on The Internet**
**By JULIANNE BASINGER, Associated Press Writer**
CHAPEL HILL, N.C. (AP) — The campus radio station at the University of North Carolina is serving up its musical fare to a wider audience these days: Listeners abroad can jam along — if they have the right computer.

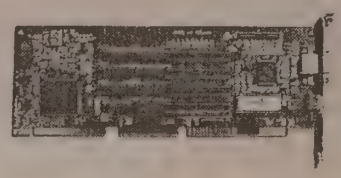
WXYC-FM recently jumped onto the Internet, becoming the first radio station to offer 24-hour programming on the air and the global computer network simultaneously.

People who want to listen can do so by gaining access to the university's site on the World Wide Web, a part of the Internet that has become popular because of the development of sound, video and graphical features. ...

### Example Of An Electronic Library Project Search

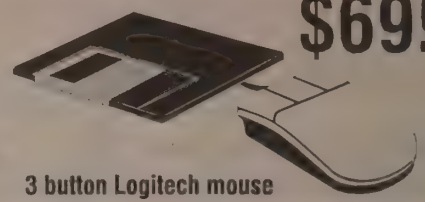
**From:** Electronic Library <elib@DB.Stanford.EDU>
**To:** savetz@northcoast.com
**Subject:** Elib Response
Search: knowbots information filtering
Threshold: 50
Score: 66
ID: 124547
Location: Math/CS Library
Author: Goldberg, D.
Author: Nichols, D.
Author: Oki, B.
Author: Terry, D.
Title: Using collaborative filtering to weave an information tapestry.
Institute: Xerox Corporation. Palo Alto Research Center.
Report: CSL-92-10.
Date: 1992.
Keyword: Continuous query.
Keyword: Information filtering.
Keyword: Active database.
Keyword: Query rewrite.
Keyword: Bounding monotonic query.
Keyword: Incremental query.
Keyword: Query language.
Score: 59
ID: 025494
Location: Math/CS Library
Author: Yan, Tak W.
Author: Garcia-Molina, Hector.
Title: Index structures for information filtering under the vector space model.
Institute: Stanford University. Department of Computer Science.
Report: STAN-CS-TR-93-1494.
Date: 1993.
Score: 55
ID: 124542
Location: Math/CS Library
Author: Terry, D.
Author: Goldberg, D.
Author: Nichols, D.
Author: Oki, B.
Title: Continuous queries over append-only databases.
Institute: Xerox Corporation. Palo Alto Research Center.
Report: CSL-92-5.
Date: 1992.
Keyword: Information filtering.
Keyword: Active database.
Keyword: Query rewrite.
Keyword: Bounding monotonic query.
Keyword: Incremental query.

# ADVANCED COMPUTER AND



2 Meg. VRAM
SVGA VLB Card **$99.00**

**486DX2-66 MOTHER BOARD**
With 256k Cache & 3 VLB Slots
**$199.00**



**$69.00**
3 button Logitech mouse
w/ Microsoft Windows Bundle Pack

## Specials

## NoteBook Specials

### 486SX-25 NoteBook
**AST Advantage! Explorer**
- 120 MB HD Drive - VGA Mono LCD
- 4 MB RAM - 1.44 MB Floppy Disk Drive
- MS-DOS 6- MS Windows V 3.1
- Lotus Organizer
- Prodigy - America Online
- Data/Fax Send/Receive Modem
- WinFax

**$749**

### 486SX-25 NoteBook
**AST Advantage! Explorer**
- 170 MB HD Drive - VGA Mono LCD
- 4 MB RAM - 1.44 MB Floppy Disk Drive
- MS-DOS 6- MS Windows V 3.1
- Lotus Organizer
- Prodigy - America Online
- Data/Fax Send/Receive Modem
- WinFax

**$799**

### Pacard Bell Statesman Plus 200C
**COLOR NOTEBOOK 486SLC2-50**
- 4 MB RAM expandable
- 200 MB Hard Drive
- 3.5" Floppy Drive
- 9.5" DSTN Color LCD
- 1 PCMCIA Type II slot
- Keyboard integrated J-mouse

11"x8.5"x2.1" 6.5 lbs.

MS-DOS, MS-Windows,
MS-Works, Money,
Productivity pack,
8 game entertainment pack

**$1099.00**

### NoteBook Computers

**TOSHIBA**

| | |
|---|---|
| T1910 486SX/33, 200MB, STN MONO | $1299 |
| T1910CS 486SX/33, 200MB, STN COLOR | $1799 |
| T1960CS/200MB, 486DX2/50,DUAL-SCAN | $1799 |
| T1960CS/320MB, 486DX2/50, DUAL-SCAN | $2269 |
| T1960CT/200MB, 486DX2/50, TFT COLOR | $2399 |
| T1960CT/320MB, 486DX2/50, TFT COLOR | $2699 |
| T2400CS/250MB, DX2/50, DUAL-SCAN CLR | $2399 |
| T2400CS/320MB, DX2/50, DUAL-SCAN CLR | $2599 |
| **T2400CT/250MB, 486DX2/50,8MB, TFT CLR** | **$2699** |
| T2400CT/320MB, DX2/50, 8MB, TFT COLOR | $2899 |
| T4700CT 486DX2/50, 200MB HD, 8MB CLR | $2729 |
| T4700CT 486DX2/50, 320MB HD, 8MB CLR | $2899 |
| T4800CT 486DX4/75, 500MB HD, TFT CLR | $3999 |
| T6600C 486DX2/66, 510MB HD, TFT-LCD | $4699 |
| T6600C/CD 486DX2/66, 510MB, TFT-LCD | $4899 |

**IBM**

| | |
|---|---|
| ThinkPad 360 — 170 MB/340 MB | $1849/$2229 |
| ThinkPad 360CS — 170 MB/340 MB | $2279/$2649 |
| ThinkPad 360C — 170 MB/340MB | $2745/$2889 |
| ThinkPad 360CSE — 170 MB/340 MB/540 MB | $2529/$2929/$3279 |
| ThinkPad 755CS 50MHz — 170 MB/340 MB/540 MB | $3199/$3649/$4049 |
| ThinkPad 755CS 75MHz — 170 MB/340 MB/540 MB | $3669/$4149/$4499 |
| ThinkPad 755C 50MHz — 170 MB/340 MB/540 MB | $4259/$4719/$5079 |
| ThinkPad 755C 75MHz — 170/340/540 MB | $4629/$5089/$5499 |
| 755CE — 540 MB/810 MB | $6645/$7195 |

*Call for other IBM products*

### Pentium 90
- 256 k Cache
- 8 MB RAM 70ns
- 540 MB HDD
- 32 Bit Controller Card
- 2S,1P, 1G Port
- PCI 32 Bit SVGA Card 1Meg
- 1.44 Floppy Drive
- 101 Keyboard Enhanced
- Hi Resoluton mouse
- Midtower case w/ 230 Watt P/S
- 14" SVGA monitor N.I.

**$1669.00**

### Pentium 75
- 256 k Cache
- 8 MB RAM 70ns
- 540 MB HDD
- 32 Bit Controller Card
- 2S,1P, 1G Port
- PCI 32 Bit SVGA Card 1Meg
- 1.44 Floppy Drive
- 101 Keyboard Enhanced
- Hi Resoluton mouse
- Midtower case w/ 230 Watt P/S
- 14" SVGA monitor N.I.

**$1399.00**

### Pentium 66
- 256 k Cache
- 8 MB RAM 70ns
- 540 MB HDD
- 32 Bit Controller Card
- 2S,1P, 1G Port
- PCI 32 Bit SVGA Card 1Meg
- 1.44 Floppy Drive
- 101 Keyboard Enhanced
- Hi Resoluton mouse
- Midtower case w/ 230 Watt P/S
- 14" SVGA monitor N.I.

**$1339.00**

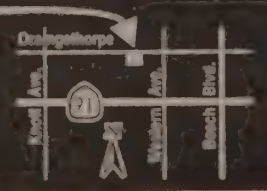
### Pentium 60
- 256 k Cache
- 8 MB RAM 70ns
- 540 MB HDD
- 32 Bit Controller Card
- 2S,1P, 1G Port
- PCI 32 Bit SVGA Card 1Meg
- 1.44 Floppy Drive
- 101 Keyboard Enhanced
- Hi Resoluton mouse
- Midtower case w/ 230 Watt P/S
- 14" SVGA monitor N.I.

**$1299.00**

Location 1

(714) 670-6321
Fax (714) 670-6322

7342 Orangethorpe Ave.
Suite #A-102
Buena Park, CA 90621




WE'VE MOVED

Location 2

(310) 618-6912
Fax (310) 618-6914

2401 208th. St.
Suite # 10
Torrance, CA 90501

# TECHNOLOGY

**We Will Try To Beat Any Advertised Price!**

**3 MONTHS SAME AS CASH!**

**Micropolis 540 MB SCSI II w/Controller $228.00**

**540 MB IDE $179.00**

**420 MB IDE $159.99**

*All specials... Limit one per customer.*

## MOTHERBOARDS WITH CPU

| | |
|---|---|
| 386DX-40 128k Cache | $82.00 |
| 486SLC2-50 | $85.00 |
| 486DLC-40 w/Math Co | $119.00 |
| 486SLC2-66 IBM VLB w/Math Co | $139.00 |
| 486DX2-66 VLB 256k Cache Overdrive ready Intel | $249.00 |
| 486DX2-80 VLB 256k Cache AMD | $239.00 |
| 486DX4-100 (AMD) | $329.00 |
| 486DX4-100 (Intel) | $429.00 |
| Pentium 60 PCI 256k Cache | $459.00 |
| Pentium 66 PCI 256k Cache | $489.00 |
| Pentium 75 PCI 256k Cache | $559.00 |
| Pentium 90 PCI 256k Cache | $809.00 |

## MEMORY

| | |
|---|---|
| 1 MEG SIMMS 70n/s | $34.50 |
| 4 MEG SIMMS 70n/s | $110.00 |
| 4 MEG 72 Pin | $135.00 |
| 8 MEG 72 Pin | $269.00 |
| 16 MEG 72 Pin | $399.00 |

## NETWORK CARDS

| | |
|---|---|
| Ethernet 16 Bit (NE2000) | $35.00 |
| Novel Netware 3.12 5U | $569.00 |
| Novel Netware 3.12 10U | Call |

Please call for other cards

## I/O CARDS

| | |
|---|---|
| AT I/O SUPER IDE | $12.00 |
| AT I/O Local Bus w/IDE | $17.00 |
| PCI Controller | $25.00 |
| SCSI Controller Card | $49.00 |

## TAPE BACKUP

| | |
|---|---|
| Colorado 250 | $145.00 |
| Conner 250 w/tape | $129.00 |
| Conner 420 w/tape | $179.00 |
| Trackker 250 | $319.00 |
| Tape cartridge 2120 | $12.00 |

## HARD DRIVES

| | |
|---|---|
| 420MB IDE | $159.99 |
| 540MB IDE | $179.99 |
| 730MB IDE | $229.00 |
| 730 SCSI | $259.00 |
| 850 MB IDE | $259.00 |
| 1 GB IDE | $389.00 |
| 1.08GB SCSI | $459.00 |

## ACCESSORIES

| | |
|---|---|
| MiniTower case w/ps | $35.00 |
| MidTower case w/ps | $55.00 |
| FullTower case w/ps | $69.00 |
| Desktop case w/ps | $45.00 |
| 1.2MB FD 5 ¼" | $42.00 |
| 1.44MB FD 3 ½" | $32.00 |
| Keyboard 101 | $15.00 |
| Keyboard 101 Professional | $22.00 |
| Keyboard Focus 2001 | $34.00 |
| Mouse | $7.00 |
| Track Ball | $20.00 |

## FAX MODEMS

| | |
|---|---|
| Fax Modem 14.4 | $59.00 |
| Voice Fax Modem 14.4 | $69.00 |
| US Robotics 14.4 | $99.00 |
| US Robotics 14.4 External | $109.00 |
| US Robotics 28.8 Internal | $199.00 |
| US Robotics 28.8 External | $239.00 |

## CD ROM DRIVES

| | |
|---|---|
| CD Rom Panasonic 562 300ms dbl speed | $109.00 |
| Mitsumi FX001-D IDE | $115.00 |
| Toshiba Quad Speed | $289.00 |
| NEC CDR 510 3XI | $199.00 |
| Mitsumi Quad Speed | $185.00 |

## HEWLETT PACKARD

### INKJET PRINTERS

| | |
|---|---|
| Deskjet 540 | $275.00 |
| Deskjet 560C | $445.00 |
| Deskjet 1200C | $1249.00 |

### LASERJET PRINTERS

| | |
|---|---|
| HP 4 Plus w/Toner | $1325.00 |
| HP 4M Plus w/Toner | $1785.00 |
| HP 4P w/Toner | $899.00 |
| HP 4MP | $1275.00 |
| HP 4L w/Toner | $619.00 |
| HP 4L M w/Toner Compl. | $950.00 |
| HP 4SI w/Toner | $2775.00 |
| HP 4 V | $1820.00 |

### SCANNERS

| | |
|---|---|
| HP IICX | $869.00 |

## CREATIVE

| | |
|---|---|
| SoundBlaster 16 Basic | $75.00 |
| SoundBlaster 16 MCD | $79.00 |
| SoundBlaster 16 MCD ASP | $159.00 |
| SoundBlaster 16 SCSI-2 | $115.00 |
| SoundBlaster 16 SCSI-2 ASP | $179.00 |

## MULTI MEDIA UPGRADE KITS

MULTI MEDIA KIT
- SONY CD ROM Double Speed
- 16 bit Sound Card
- Amplified Speakers/ Microphone
- 10 CD Titles $199.00

| | |
|---|---|
| Multimedia Kit Quad Speed | $279.00 |
| CREATIVE LABS Digital School House | $259.00 |

## NEC Monitors

| | | |
|---|---|---|
| SVGA 14" | 1024X768 | $325 |
| MULTISYNC 3V 15" | 1024x768 | $475 |
| MULTISYNC 3FGE 15" | 1024x768 | $575 |
| MULTISYNC 4FGE 15" | 1024x768 | $649 |
| MULTISYNC 5FGE 17" | 1024x768 | $975 |
| MULTISYNC 5FGP 17" | 1280x1024 | $1095 |
| MULTISYNC 6FGP 21" | 1280x1024 | $1929 |

## View Sonic

| | |
|---|---|
| V6E 14" .28 NI 1024x768 Green | $249 |
| V15ES 15" Flat .28 NI 1024x768 † | $319 |
| V15 15" Flat .27 NI 1280x1024 Digital† | $389 |
| V15G 15" Flat .28 NI 1280x1024 Digital† | $359 |
| V17E 17" Flat .28 NI 1280x1024 MAC† | $659 |
| V17G 17" Flat .28 NI 1280x1024† | $679 |
| V17 17" Flat .27 NI 1600x1280 MAC† | $799 |
| V20G 20" Flat .28 NI 1600X1280 MAC† | $1199 |
| V20 20" Flat .28 NI 1600x1280 MAC MPR-II | $1389 |
| V21 21" Flat .28 NI 1600x1280 MAC† | $1559 |
| V21PS 21" Flat .25 NI 1600x1280 Super Dark MAC† | $1599 |

†Green and MPR-II

## MAG

| | |
|---|---|
| MAG DX15F 15" .28 NI 1280X1024 MPR-II Green | $339 |
| MAG DX17F 17" .26 NI 1280X1024 MPR-II Green | $629 |
| MAG MX15F 15" .28 NI 1280X1024 MPR-II Auto-Sizing | $449 |
| MAG MXP17F 17" Flat .26 NI 1600X1280 Anti-reflection coating MPR-II Green | $879 |
| MAG MX21F 21" .28 NI 1600X1280 MPR-II Green | $1599 |

## MONITORS

| | |
|---|---|
| SVGA 14".28 NI | $195.00 |
| SVGA 15" .28 NI | $279.00 |
| SVGA 17" .26 NI | $539.00 |

## VIDEO CARDS

| | |
|---|---|
| Diamond SpeedStar Pro VLB 1MB | $97 |
| Diamond Stealth 64VLB 2MB DRAM/VRAM | $185/295 |
| Diamond Stealth 32 PCI 2MB | $159 |
| Diamond Stealth 64 PCI 2MB DRAM/VRAM | $189/299 |
| Diamond Viper SE PCI 2MB VRAM | $269 |
| Diamond Viper SE VL 2MB VRAM | $299 |
| Media Vision Pro 1024 VLB 2 MB VRAM | $99 |
| 1MB Trident VLB | $69 |
| Western Digital Paradise VLB 1 MB | $69 |
| 1MB Trident ISA | $56 |

## 486DX4-100

- 486DX4-100 VESA w/256k Cache
- 4MB Ram 70 n/s
- 420 MB IDE HD
- VLB Graphics Card w/1MB
- VLB IDE CARD
- DIGITAL Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 14" NI SVGA Monitor .28
- Mouse

**$949.00**

## 486DX2-80

- 486DX2-80 VESA w/256k Cache
- 4MB Ram 70 n/s
- 420 MB IDE HD
- VLB Graphics Card w/1MB
- VLB IDE CARD
- DIGITAL Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 14" NI SVGA Monitor .28
- Mouse

**$879.00**

## 486DX2-66 VLB

- 486DX2-66 VESA w/256k Cache
- 4MB Ram 70 n/s
- VLB Graphics Card w/1MB
- VLB IDE CARD
- DIGITAL Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 420 MB IDE HD
- 14" NI SVGA Monitor .28
- Mouse

**$859.00**

## 486SLC2-66 w/VLB MathCo

- 486SLC2-66 VLB w/MATHCO
- 4MB Ram 70 n/s
- VLB SVGA w/1MB
- VLB IDE I/O Cont.
- DIGITAL Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 420 MB IDE HD
- 14" NI SVGA Monitor .28
- Mouse

**$789.00**

## 486DLC-40 w/MathCo

- 486DLC-40 w/128k Cache & MATHCO
- 4MB Ram 70 n/s
- SVGA Card
- SUPER IDE I/O CONT.
- Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 420 MB IDE HD
- 14" NI SVGA Monitor .28
- Mouse

**$699.00**

## 486SLC-33

- 486SLC-33
- 4MB Ram 70 n/s
- SVGA Card
- SUPER IDE I/O CONT.
- Digital Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 420 MB IDE HD
- 14" SVGA Monitor .28
- Mouse

**$659.00**

Location 3

(818) 237–2020

Fax (818) 451–0543

5913-B Rosemead Blvd.
San Gabriel CA 91775

Location 4

(212) 967–1616
Fax (212) 967-0872
146 W. 29th St., 10th Fl.
New York, NY 10001

Financing Available

MasterCard DISCOVER VISA

All systems come with a one year parts and labor warranty. Prices are subject to change without notice.

Not responsible for typographical errors.

All product names are trademarks of their respective companies.

All prices are cash / check

$209 KT-445C
Fast SCSI-2
VESA
BT445C

$219 KT-545C
Fast SCSI-2
PC/AT
BT545C

$339 KT-747C
Fast SCSI-2
EISA
BT747C

**30-DAY MONEY BACK GUARANTEE**

*Except on opened software and used cartridges.*


**Responz PDQ**
40559 Encyclopedia Circle
Fremont, California 94538
Phone ..... 510-354-3030
Fax ..... 510-651-4123


*Dealer and Sales Representative inquiries are welcome!*

# BusLogic

## BusLogic® IDE Cache Controllers Outperform all Enhanced IDE Controllers

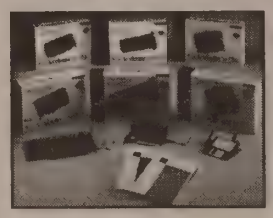
These cache controllers can improve the performance of your PCI, VESA, or PC/AT system by up to 350%, depending on system configuration. This dramatic improvement is accomplished with a winning combination of advanced architecture, optimized caching algorithms using up to 16MB of cache memory. Increase your disk I/O performance by simply adding industry standard cache SIMMs. All major operating systems are supported, including DOS, Windows, Windows NT, NetWare, OS/2 and SCO Unix.

**Cache Controllers for PCI, VESA, and PC/AT Systems.**

- Reduce average disk access time to as low as 0.3ms
- AutoIDE™ Utility for ease of installation and configuration
- Cache expandability from 512KB to 16MB
- Disk mirroring support for 100% disk fault tolerance
- Attach up to 4 IDE Drives, up to 4GB each
- Green Mode reduces power consumption

### BusLogic IDE Cache Controller Kits

| Model | Description | System Bus | Board | Price |
|---|---|---|---|---|
| KT410A | IDE Cache Controller | VESA | BT410A | $129 |
| KT510A | IDE Cache controller | PC/AT | BT510A | $89 |
| KT910A | IDE Cache Controller | PCI | BT910A | $169 |



### Features

- Fast SCSI-2 data transfers of up to 10MB/sec, Fast & Wide SCSI-2 of up to 20MB/sec
- Support for up to 7 or 15 (Wide) SCSI devices and dual floppy (not supported on PCI)
- Compatible with all major operating systems and SCSI peripherals
- Simple to install and configure using the AutoSCSI utility
- Includes award-winning CorelSCSI for CD-ROM

## Increase Your System Performance with BusLogic Bus Master Fast and Fast & Wide SCSI-2 Adapter Kits!

Achieve the highest performance from your PCI, EISA, VESA or PC/AT systems with BusLogic® SCSI Accelerator™ host adapters providing the ultimate in Fast and Fast & Wide SCSI-2 configurations. A perfect combination for multitasking and multimedia environments. Compatibility is key for successful system installations. BusLogic adapters feature the broadest range of operating system support available in the market today, with embedded drivers in many. BusLogic works closely with peripheral suppliers, so compatibility is "designed in" to assure you of proven performance with all types of SCSI devices.

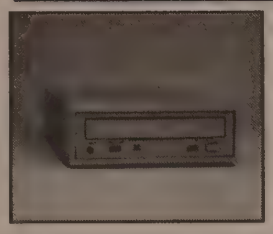
| Model | Description | System Bus | Board | Price |
|---|---|---|---|---|
| KT-445C | Fast SCSI-2 | VESA | BT445C | $209 |
| KT-545C | Fast SCSI-2 | PC/AT | BT545C | $219 |
| KT-747C | Fast SCSI-2 | EISA | BT747C | $339 |
| KT-757C | Fast & Wide SCSI-2 | EISA | BT757C | $399 |
| KT-946C | Fast SCSI-2 | PCI | BT946C | $279 |
| KT-956C | Fast & Wide SCSI-2 | PCI | BT956C | $329 |

**CALL US TODAY TOLL-FREE 8AM TO 7PM MON-SAT PST**

# 800-317-3040

**Responz PDQ • 40559 Encyclopedia Circle • Fremont, California 94538 • Phone 510-354-3030 • Fax 510-651-4123**

## CD-ROM Dual Speed Drives From Lion Optics



**IDE Internal XC-200 AI**
233msec, 128KB **$114**
Bundled w/Microsoft Encarta **$154**

**IDE Internal XC-200 EI**
233msec, 256KB **$119**
Bundled w/Microsoft Encarta **$159**

**PC SCSI Internal XC-200 SI**
250msec, 256KB **$139**
**PC SCSI External XC-200 SE**
250msec, 256KB **$179**
**Mac SCSI External XC-200 SM**
250msec, 256KB w/CD-Autocache **$199**

## Lowest Priced Removable Cartridges, Magneto Optical Media and CD-Recordable media you can buy!

### Magneto Optical Media

| 3.5" | 2-PACK | 5-PACK |
|---|---|---|
| 128MB | $24ea | $23ea |
| 230MB | $33ea | $32ea |

| 5.25" | SINGLE | 10-PACK |
|---|---|---|
| 650MB | $65 | $64ea |
| 1.3GB | $89 | $88ea |

### SyQuest Media

| 5.25" | SINGLE | 10-PACK |
|---|---|---|
| 200MB | $76 | $73.50ea |

| 3.5" | SINGLE | 10-PACK |
|---|---|---|
| 105MB | $55 | $54ea |
| 270MB | $63 | $62ea |

### CD-Recordable Media

| CD-R | 5-PACK | 100-PACK |
|---|---|---|
| 74 min. | $14ea | $13ea |
| 63 min. | $13ea | $12ea |

## FREE 2-DAY DELIVERY
by Emery for products below

### SyQuest Compatible

| 5.25" | SINGLE | 10-PACK |
|---|---|---|
| 44MB | $40 | $38.50ea |
| 88MB | $44 | $42.50ea |

### Iomega Bernoulli

| | SINGLE | 5-PACK |
|---|---|---|
| 90MB | $91 | $81ea |
| 150MB | $96 | $86ea |
| 230MB | $99 | $89ea |

## Magneto Optical Drives

| FUJITSU 3.5" DynaMO 230MB | PRICE |
|---|---|
| M2512A | $730 |
| External for Mac | $802 |
| Internal for Mac | $774 |
| External for PC | $870 |
| Internal for PC | $768 |

| IBM 3.5" 230MB, 30ms 256KB cache | PRICE |
|---|---|
| External for Mac & PC | $799 |
| Internal for Mac & PC | $749 |

| IBM 1.3G, 29ms 1MB cache | PRICE |
|---|---|
| External for Mac & PC | $1,999 |
| Internal for Mac & PC | $1,929 |

## Fujitsu Scanners

| | |
|---|---|
| ScanPartner Jr. for Mac | $369 |
| ScanPartner Jr. for PC | $459 |
| ScanPartner 10 | $1,049 |
| ScanPartner 10 Color | $1,209 |

## Conner Tape Back-up Drives

| | |
|---|---|
| 420MB QIC CP420R | $171 |
| 850MB QIC CP850R | $264 |
| 4GB QIC CP4000R | $545 |
| 4GB SCSI Int. CP4324RP | $908 |

## Hard Drives

| FUJITSU 3.5" Drives | PRICE |
|---|---|
| 530MB SCSI-2 internal M26845SA | $220 |
| 530MB SCSI-2 external for Mac or PC | $299 |

| MAXTOR 3.5" Drives | PRICE |
|---|---|
| 345MB SCSI-2 7345S | $160 |
| 420MB IDE 7420AV | $179 |
| 540MB IDE 7540AV | $204 |
| 546MB IDE 7456A | $209 |
| 850MB IDE 7850AV | $253 |
| 1.26GB IDE 71260A | $396 |

| QUANTUM 3.5" IDE Drives | PRICE |
|---|---|
| 270MB IDE Maverick QM30270MVA | $165 |
| 540MB IDE Maverick QM30540MVA | $215 |
| 730MB IDE Lightning QM30730LTA | $252 |

| QUANTUM 3.5" SCSI-2 Drives | INTERNAL | EXTERNAL For Mac/PC |
|---|---|---|
| 540MB Maverick QM30540MVS | $226 | $325 |
| 730MB Lightning QM30730MVS | $264 | $349 |
| 1GB Empire 1080S | $580 | $639 |
| 2.1GB Empire 2100S | $927 | $1,029 |
| 2.1GB Atlas XP32150S | $1,084 | $1,209 |
| 4.3GB Atlas XP34300S | $1,718 | $1,899 |

| MICROPOLIS 3.5" SCSI-2 Drives | INTERNAL |
|---|---|
| 2GB 7200RPM M4221 | $989 |
| 4GB 7200RPM M3243 | $1,662 |
| 9GB 7200RPM M1991 | $3,025 |

PHILIPS
FUJITSU

MasterCard VISA AMERICAN EXPRESS

*No surcharge for MasterCard, VISA or American Express*

RESPONZ PDQ

TOLL FREE TECHNICAL SUPPORT

All prices and specifications are subject to change without notice. Please call for current pricing. All special pricing and promotions limited to availability. Refused orders are subject to restocking fees. Drive-for-Drive repair warranty. Responz PDQ will at its discretion, replace or repair products found to be defective according to the terms of the product's warranty. Toll-free technical support hours are 8am to 5pm PST, Monday thru Friday. All registered trademarks and logos are property of their respective companies.

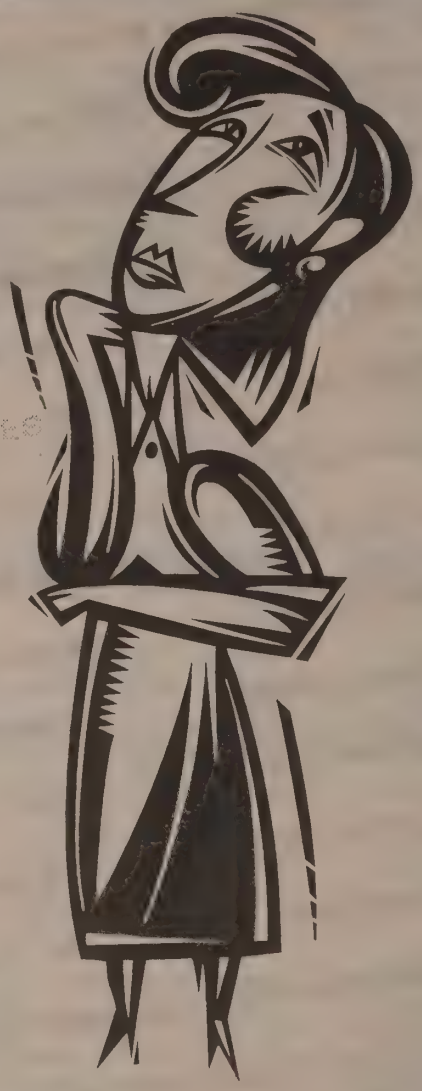
**30-DAY**
**MONEY BACK GUARANTEE**


**Responz PDQ**
40559 Encyclopedia Circle
Fremont, California 94538
Phone ..... 510-354-3030
Fax ..... 510-651-4123


*Dealer and Sales Representative inquiries are welcome!*

# LOOKING FOR A GOOD PC?

Look no further.
MICROTIMES
is your source
for all brand
name PCs and
your PC dealers.
Compare and
shop with...



MICROTIMES™





*continued from page 56*


joining the channel *#forsale*.

There are twenty-five pages of "Table of Contents" and fifteen more of index, so you will be likely to find what you want.

People have been saying, "OK, what is the Internet good for?" The *Internet Yellow Pages* lets you know the sort of things you can find out there, and it tells you just where to find them.

But by the time you get to them (says a cynical thought) they may be gone. The Internet is like a dream, with things arising and vanishing away. The *Yellow Pages* seemed like such a good thing that I was suspicious. How could they put together a list of five thousand Internet resources without fudging? Were some of these listings former-but-no-longer sites?

So I ran a little test. I went online on The WELL, where they have quite complete Internet access, and tried out some of the addresses. I picked ten resources at random from the *Yellow Pages*. They ranged from a commercial art gallery to the European Community's eight-language database in Luxembourg. I tried to reach each of them. I am pleased to say that I got through to eight of them. Two were busy, which means that they exist but are inundated with traffic. All ten of the ten resources that I tried were still in service.

It looks as if Hahn and Stout have produced a second masterwork to match their *Internet Complete Reference*. You can buy *The Internet Yellow Pages* (Osborne/McGraw-Hill) for $29.95 in your favorite bookstore. You'll probably save that much in a few days, downloading free information from sites all over the world.

Next month we'll be looking at the programs for the two-platform office. Until then, keep the cat off the printer. ■


Copyright © 1995 by Birrell Walsh. All rights reserved.


## RESOURCES:

**First Things First 4.0, $59.00**
**First Things First Proactive 1.5, $99.00**
Visionary Software
1-800-877-1832

**InfoSelect**
Micro Logic Corporation
1-800-342-5930


## CAD DRAFTING/PLOTTING SERVICE

HEWLETT PACKARD
*Authorized Reseller*
ARTISOFT INC.
NOVELL.
CADVANCE
AUTOCAD®

| PLOTTERS | PLOTTING | WMBE SERVICES |
|---|---|---|
| HP DESIGNJET<br>NEW MODELS<br>NEW PRICING<br>COME IN AND COMPARE THE OUTPUT | MONOCHROME OR COLOR<br>CAD OR WINDOWS<br>CALL FOR DEMONSTRATION | * CADD DRAFTING<br>* CADD PLOTTING<br>* PLOTTER SUPPLIES<br>* BLUEPRINTING<br>* XEROX * SHACOH<br>* ENGINEERING COPIERS<br>* BLUEPRINT MACHINES |

Lease and Financing Available
Trademarks belong to their respective owners.

**5% OFF FIRST ORDER - PLOTTER SUPPLIES!**

LOGICACHE COMPUTERS, INC.
CADD • COMPUTERS • PLOTTERS • SUPPLIES
PLOTTING AND DRAFTING SERVICE • WMBE

TEL: (714) 855-1211
FAX: (714) 855-3892
MODEM: (714) 855-0387

HOURS: M-F: 9 am to 6 pm
Sat & Sun: By Appt. Only
22691 Lambert St., Ste. 505
Lake Forest, CA 92630

# Symphony COMPUTERS

9620 E. Las Tunas Dr.
Temple City, CA 91780
(818) 309-9672

AD#950222

# FULLY FEATURED • UNDER PRICED

NOT THE OTHER WAY AROUND

Financing Available

90 DAYS SAME AS CASH

Lifetime Labor & 2 Years limited Parts Warranty*

*Call store for complete details

Prices, Specifications, Terms & Conditions are subject to change without notice. Not responsible for Typographic errors.

## INFINITY 2000 I M
### IBM VESA 486-66 SERIES

- 486 IBM Vesa Local Bus MotherBoard
- Math Coprocessor Built In
- **4MB** RAM
- NEC 1.4MB Drive
- **250MB** IDE HardDrive
- 32 Bits VLB Windows Accelerator w/1MB
- 32Bits VLB IDE Controller w/2S/1P/1G
- **14" SVGA Color Monitor**
- Mini Tower Case w/Power Supply
- 101 Enhanced Key Board
- *Free mouse*

SPECIAL

SPECIAL $798

## INFINITY 2000 I M
### VESA LOCAL BUS SERIES

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots, 72 pins)
- Pentium Overdrive P24T socket ready
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **4MB** RAM exp. to 128MB
- NEC 1.4MB Drive
- **420MB IDE Hard Drive**
- 32Bits VLB Windows Accelerator w/1MB
- 32Bits VLB IDE Controller w/2S/1P/1G
- **14" Non-Interlaced SVGA Color Monitor .28**
- Deluxe Mid Tower Case w/230W Power Supply
- 101 Enhanced Key Board
- *Free mouse*

66MHz
SPECIAL $948

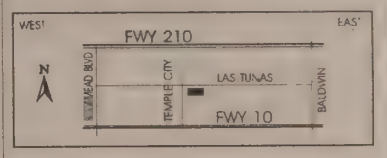
## INFINITY 2000 I M
### MULTIMEDIA 486-66 SERIES

- 486 IBM Vesa Local Bus MotherBoard
- Math Coprocessor Built In
- **4MB** RAM
- NEC 1.4MB Drive
- **250MB** IDE HardDrive
- 32 Bits VLB Windows Accelerator w/1MB
- 32Bits VLB IDE Controller w/2S/1P/1G
- **14" SVGA Color Monitor**
- Mini Tower Case w/Power Supply
- 101 Enhanced Key Board
- PANASONIC CD-ROM (Double Speed) Sound Blaster 16 compatible w/Mini speakers
- *Free mouse*
- *Free 14 CD Titles*

SPECIAL $998

## INFINITY 2000 Authorized Dealers
Santa Clara • Los Angeles • San Diego

Symphony COMPUTERS




SOUTHERN CALIFORNIA LOCATION
9620 E. LAS TUNAS DRIVE TEMPLE CITY CA 91780
TEL: (818) 309-9672 FAX: (818) 309-7579
MON-FRI: 9:00AM - 6:00PM
SATURDAY 10:00AM - 6:00PM
SUNDAY: CLOSE

NORTHERN CALIFORNIA LOCATION
3460 EDWARD AVE. SANTA CLARA, CA 95054

## INFINITY 2000 I M
### MULTIMEDIA LOCAL BUS SERIES
486DX2-66

- 486 Vesa Local Bus MotherBoard (3 vesa slots, 72 pins)
- Pentium Overdrive P24T support
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **4MB** RAM exp. to 128MB
- NEC 1.4MB Drive
- **420MB** IDE Hard Drive
- 32Bits VLB Windows Accelerator w/1MB
- 32Bits VLB IDE Controller w/2S/1P/1G
- **14"** Non-Interlaced SVGA Color Monitor .28
- Deluxe Mid Tower Case w/230W Power Supply
- 101 Enhanced Key Board
- PANASONIC CD-ROM (Double Speed) Sound Blaster 16 compatible w/Mini Speakers
- *Free mouse*
- *Free 14 CD Titles (Encyclopedia, U.S. & World Atlas, Chessmaster, & Popular Challenge Pak)*

SPECIAL $1148

## INFINITY 2000 I M
### MULTIMEDIA ACTION-G SERIES
486DX2-66

- 486 Vesa Local Bus MotherBoard (3 vesa slots, 72 pins)
- Pentium Overdrive P24T support
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB** RAM exp. to 128MB
- NEC 1.4MB Drive
- **540MB** IDE Hard Drive
- 32Bits VLB Windows Accelerator w/1MB
- 32Bits VLB IDE Controller w/2S/1P/1G
- **15"** Non-Interlaced SVGA Color Monitor .28
- Deluxe Mid Tower Case w/230W Power Supply
- 101 Enhanced Key Board
- PANASONIC CD-ROM (Double Speed) Sound Blaster 16 compatible w/80W Speakers
- *Free mouse*
- *Free 14 CD Titles (Encyclopedia, U.S. & World Atlas, Chessmaster, & Popular Challenge Pak)*

SPECIAL $1398

## INFINITY 2000 I M
### MULTIMEDIA 3X SERIES
486DX2-66

- 486 Vesa Local Bus MotherBoard (3 vesa slots, 72 pins)
- Pentium Overdrive P24T support
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB** RAM exp. to 128MB
- NEC 1.4MB Drive
- **540MB** IDE Hard Drive
- 32Bits VLB Windows Accelerator w/1MB
- 32Bits VLB IDE Controller w/2S/1P/1G
- **15"** *Non-Interlaced SVGA Color Monitor .28*
- Deluxe Mid Tower Case w/230W Power Supply
- 101 Enhanced Key Board
- NEC CD-ROM (Triple Speed) Sound Blaster SCSI-2 w/80W Speakers
- *Free mouse*
- *Free 14 CD Titles (Encyclopedia, U.S. & World Atlas, Chessmaster, & Popular Challenge Pak)*

SPECIAL $1548

## INFINITY 2000 I M
### MULTIMEDIA 4X SERIES
486DX2-66

- 486 Vesa Local Bus MotherBoard (3 vesa slots, 72 pins)
- Pentium Overdrive P24T support
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB** RAM exp. to 128MB
- NEC 1.4MB Drive
- **540MB** IDE Hard Drive
- 32Bits VLB Windows Accelerator w/1MB
- 32Bits VLB IDE Controller w/2S/1P/1G
- **15"** *Non-Interlaced SVGA Color Monitor .28*
- Deluxe Mid Tower Case w/230W Power Supply
- 101 Enhanced Key Board
- TEAC CD-ROM (Quad Speed) Sound Blaster 16 MCD w/80W Speakers
- *Free mouse*
- *Free 14 CD Titles (Encyclopedia, U.S. & World Atlas, Chessmaster, & Popular Challenge Pak)*

SPECIAL $1578

## INFINITY 2000 I M
### PENTIUM P5 SERIES

- 586 Pentium PCI Motherboard
- Pentium 586 Processor
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB** RAM exp. to 128MB
- NEC 1.4MB Drive
- **540MB** IDE HardDrive
- PCI HDD IDE Controller w/2S,1P, 1G
- *Diamond Stealth PCI Windows Accelerator w/1MB*
- 14" Non-Interlaced SVGA Color Monitor .28
- Mid Tower Case w/Power Supply
- 101 Enhanced Key Board
- *Free mouse*

PENTIUM SYSTEM

60MHz 90MHz
SPECIAL $1498 $1698

## INFINITY 2000 I M
### MULTIMEDIA PENTIUM P5 SERIES

- 586 Pentium PCI Motherboard
- Pentium 586 Processor
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB** RAM exp. to 128MB
- NEC 1.4MB Drive
- **540MB** IDE HardDrive
- PCI Enhanced IDE HDD Controller
- *Diamond Stealth PCI Windows Accelerator w/1MB*
- 14" Non-Interlaced SVGA Color Monitor .28
- Mid Tower Case w/Power Supply
- 101 Enhanced Keyboard
- **PANASONIC CD-ROM (Double Speed)** Sound Blaster 16 compatible w/Mini Speakers
- *Free mouse*
- *Free 14 CD Titles (Encyclopedia, U.S. & World Atlas, Chessmaster, & Popular Challenge Pak)*

60MHz 90MHz
SPECIAL $1698 $1898

## INFINITY 2000 I M
### MULTIMEDIA PENTIUM PCI SERIES

- 586 Pentium PCI Motherboard
- Pentium 586 Processor
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB** RAM exp. to 128MB
- NEC 1.4MB Drive
- **540MB** IDE HardDrive
- PCI Enhanced IDE HDD Controller
- Diamond Stealth 64 PCI Windows Accelerator w/2MB
- **15"** *Non-Interlaced SVGA Color Monitor .28*
- Mid Tower Case w/Power Supply
- 101 Enhanced Keyboard
- PANASONIC CD-ROM (Double Speed) Sound Blaster 16 MCD w/80W Speakers
- *Free mouse*
- *Free 14 CD Titles (Encyclopedia, U.S. & World Atlas, Chessmaster, & Popular Challenge Pak)*

60MHz 90MHz
SPECIAL $1848 $2068

## INFINITY 2000 I M
### MULTIMEDIA PENTIUM PYTHON SERIES

- 586 Pentium PCI Motherboard
- Pentium 586 Processor
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB** RAM exp. to 128MB
- NEC 1.4MB Drive
- **1.0GB Enhanced IDE Hard Drive**
- PCI Enhanced IDE HDD Controller
- **15"** *Non-Interlaced SVGA Color Monitor .28*
- Diamond Stealth 64 PCI Windows Accelerator w/2MB
- Mid Tower Case w/Power Supply
- 101 Enhanced Keyboard
- TEAC CD-ROM (QUAD SPEED) Sound Blaster 16 MCD w/80W Speakers
- *Free mouse*
- *Free 14 CD Titles (Encyclopedia, U.S. & World Atlas, Chessmaster, & Popular Challenge Pak)*

60MHz 90MHz
SPECIAL $2198 $2398

MARKETPLACE

MICRO

# Search No More !! We Provide You With the Best Quality Products and Affordable Price

MELCO INT'L GROUP

## Pentium Power

3 PCI Slots
**8MB RAM** ,1.44MB F.D.D. ( 3.5")
**750MB** H.D.D.
PCI IDE H.D.D. Ctrl.
**PCI Diamond Stealth 64 VRAM or ATI Mach 64 VRAM w/2MB**
**15" N-Int.** Green Digital Monitor
101 Enhanced Keyboard
Microsoft compatible serial mouse
Midi Tower case w/Digital Display
High Speed I/O w/**16550 UART**

| | |
|---|---|
| Pentium 60MHz | $ 1700 |
| Pentium 66MHz | $ 1800 |
| Pentium 90MHz | $ 1975 |

## Green 486 PC

Upgradable to **486DX4-100 CPU**
Pentium Overdrive Ready
4MB RAM, 256K External Cache
540MB H.D.D. , 1.44MB F.D.D.
VL Bus IDE + I/O Ctrl. Card
VL Bus 1MB SVGA Card
14" .28 SVGA 1024x768 **N-Int.** Monitor
Digital Mini Tower Case, Key Board & Mouse

| | |
|---|---|
| 486SX-33 MHz | $ 859 |
| 486DX-33 MHz | $ 899 |
| 486DX2-66 MHz | $ 989 |
| 486DX2-80 MHz | $1079 |
| 486DX4-100 MHz | $1339 |

## Pentium System

3 PCI Slots
4MB RAM
1.44MB F.D.D. ( 3.5")
540MB H.D.D.
PCI IDE H.D.D. Ctrl.
PCI 64 Bits SVGA Card w/1MB
14" N-Int. Green Monitor
101 Enhanced Keyboard
Microsoft compatible serial mouse
Digital Midi Tower Case

| | |
|---|---|
| Pentium 60MHz | $ 1439 |
| Pentium 66MHz | $ 1569 |
| Pentium 90MHz | $ 1675 |

## BAREBONE SYSTEMS

Systems Include :
1.44MB F.D.D., IDE+I/O, Mini Tower Case
101 Key Board, Serial Mouse

| | |
|---|---|
| 386SX-40MHz | $ 179 |
| 386DX-40MHz | $ 189 |
| 486SX-33MHz | $ 280 |
| 486DX-33MHz | $ 375 |
| 486DX2-50MHz | $ 385 |
| 486DX2-66MHz | $ 425 |
| 486DX2-80MHz | $ 450 |
| 486DX4-100MHz | $ 749 |
| Pentium 60MHz | $ 755 |
| Pentium 66MHz | $ 850 |
| Pentium 90MHz | $ 999 |

## Quanta Micro Multi Media Pentium 90 MHz Notebook

Pentium 90MHz, 16Bits Stereo Sound Blaster
8MB RAM, 1.44MB F.D.D., Removable H.D.D.
1MB Video RAM, PCMCIA Type I,II,III
9.5" LCD Color Screen, Hgh Speed I/O
Adaptec SCSI-II Interface, VL Bus Video and
IDE Interface, VGA Monitor Port, Microjoystick Mouse
Removable NI-MH Battery, MS-DOS 6.22

**w/260MB H.D.D. $ 2995**
**w/340MB H.D.D $ 3095**
**w/520MB H.D.D. $ 3295**

## CD Tittles Software

### Microsoft 5 CD Titles $ 108

- Microsoft 1995 Encarta
- Microsoft Works
- Microsoft Golf
- Dangerous Creature
- Microsoft Money
- Entertainment Pack

### Super 10 CD Value Packs $ 35

100 Top Action Games, Dinosaur Safari, Automobile Almanac, Mathematic Encyclopedia, Smart Photo CD, Tax Cut, World War II, Windows Tool & Media Magazines Issue I and II

### Home Office CD-ROM $ 35

Managing Your Money, Tax Cut, Card Shop Plus
Money In the 90's, Smart Photo CD

### Family CD Value Pack $ 35

Family Doctor, reference library 2.0,Space Mission
20th Century Almanac Video

### Misceleaneous CD-ROM

| | |
|---|---|
| Dunes | $ 35 |
| Mad Dog McRee | $ 35 |
| Arthur's Teacher Trouble | $ 20 |
| PC Karaoke | $ 25 |
| Mayo Clinic Health Book | $ 30 |
| F-14 Tom Cat | $ 35 |
| Publish It | $ 20 |
| Wolf | $ 35 |
| The Journey Man Project | $ 25 |
| Family Doctor | $ 15 |
| Barron's College Guide | $ 20 |
| Mario Is Missing /D Generation | $ 25 |

## Graphics Card

| | |
|---|---|
| Monochrome Card | $ 12 |
| 256K SVGA Card | $ 28 |
| 512K SVGA Card | $ 38 |
| 1MEG ISA SVAG Card | $ 55 |
| 32 Bits VL-Bus w/1MB Upg. to 2 MB | $ 70 |
| Diamond Stelath 64 VRAM w/2MB VLB | $ 285 |
| ATI Mach64 VRAM w/2MB VLB | $ 280 |
| 64 Bits PCI w/2MB Avax | $ 145 |
| 64 Bits PCI w/2MB ATI Mach 32 | $ 175 |
| 64 Bits PCI w/2MB Diamond Ste | $ 320 |

## Interface Card

| | |
|---|---|
| 16 Bits IDE+I/O w/2s1p1g | $ 12 |
| 32 Bits VI-Bus IDE+I/O w/2s1p1g Supports 4 H.D.D. | $ 20 |
| SCSI H.D.D. Ctrl. Card | $ 100 |
| 32 Bits VL-Bus SCSI2+IDE+I/O | $ 125 |
| 64 Bits PCI IDE H.D.D. Ctrl. | $ 25 |
| 64 Bits PCI SCSI Adaptec 2940 | $ 240 |

## Mother Board

| | |
|---|---|
| 386SX-30MHz w/CPU | $ 65 |
| 386DX40MHz w/CPU | $ 95 |
| 486SX/DX VL-Bus **Green PC M.B.** Upgradable from SX-33 to DX4-100 | $ 100 |
| 486SX/DX/DX2/DX4 **VL & PCI Bus** | $ 120 |
| Pentium 60/66 MHz | $ 210 |
| Pentium 90/100MHz | $ 320 |

## Sound Card

| | |
|---|---|
| Sound Blaster 16 Basic | $ 100 |
| Sound Blaster 16MCD | $ 120 |
| Sound Blaster 16 SCSI2 | $ 140 |
| Pro Audio Spectrum | $ 75 |
| Generic Sound Card | $ 60 |

## Hard Drive

| | |
|---|---|
| 210MB IDE | $ 160 |
| 280MB IDE | $ 185 |
| 420MB IDE | $ 200 |
| 540MB IDE | $ 225 |
| 540MB SCSI | $ 275 |
| 1.08GIG IDE | $ 550 |
| 1.08GIG SCSI | $ 595 |

## Cases

| | |
|---|---|
| Desktop Case | $ 50 |
| Mini Tower w/ Digital | $ 40 |
| Mid Tower w/ Digital | $ 60 |
| Full Tower w/ Digital | $ 75 |

## Monitor

| | |
|---|---|
| 14" Mono Chrome Monitor | $ 90 |
| 14" SVGA .28 Int. Monitor | $ 200 |
| 14" SVGA .28 N-Int. Monitor | $ 220 |
| 15" SVGA .28 N-Int. Digital Ctrl. Monitor | $ 335 |
| 17" SVGA .28 N-Int. Digital Ctrl. Monitor | $ 610 |

## CD-ROM

| | |
|---|---|
| Mitsumi Double Speed | $ 125 |
| NEC 3X Speed SCSI | $ 255 |
| Toshiba 3X Speed SCSI | $ 250 |
| Teac Quad Speed | $ 250 |
| Mitsumi Quad Speed | $ 245 |

## Fax/Modem

| | |
|---|---|
| 14.4 Internal Fax/modem | $ 65 |
| 14.4 Voice Fax/Modem | $ 70 |
| 14.4 External Fax/Modem | $100 |
| 28.8 Internal Fax/Modem | $ 155 |

## Special items

| | |
|---|---|
| VL-Bus SVGA Card & IDE+I/O Combo | $ 95 |
| **Fast** VL-Bus IDE+I/O Ctrl. Card | $ 35 |
| AMD PCI Ethernet Card | $100 |

Call for more other items

## Quad Speed MULTI MEDIA KIT

Quad Speed CD-ROM
Sound Blaster 16Bits Sound Card
Super 10 CD Packs
Stereo Speaker, Microphone

**$ 285**

*Computerize your business with* **Novell** *networking !!!*

## NOVELL LAN SPECIAL

1 File Server and 2 Workstation

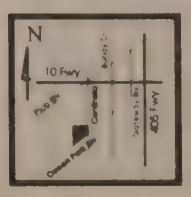
Includes basic wiring, installation and setup

**$ 4899 only !!**
No Hidden cost

**File Server Pentium 90 MHz**
8MB RAM, 1.44MB F.D.D., 540MB H.D.D.
MGP Card and Monitor, Full Tower Case
Novell 3.12 5 Users

**Workstation 486DX2-50MHz**
2MB RAM, 1.44MB F.D.D., 210MB H.D.D.
SVGA Card and 14" Monitor
Mini Tower Case,Key Board and Mouse

AUTHORIZED DEALER FOR MACOLA ACCOUNTING SOFTWARE
For retail, Wholesale, Distributor, Manufacture, any industry
For four consecutive reviews, Price Water House has selected MACOLA as PC Magazine's "Editor Choice" award winner. The only micro base accounting software ever do so.
We provide consultation, on-site installation, Upgrade and maintain.




***West L.A. Location***
**S.P.C.**
**Phn : 310-581-8462**
**Fax : 310-581-8464**
***3435 Ocean Park Blv., # 106***
***Santa Monica, CA 90405***

***Santa Fe Springs Location***
**Phn : 310-907-1180**
**Fax : 310-907-1186**
***12035 Burke St. #3***
***Santa Fe Springs, CA 90670***

We honor Government, Corporate & School P.O.'s
We Accept
VISA & Master Card

**Office Hours :**
**Mon-Friday 8:30am - 7:00pm**
**Saturday 9:30am - 4:00pm**

# 486DX2-66MHz

Pentium Ready (ZIF)
(256KB Cache)
200W Power Supply
Supply Mini-Tower Case
4MB RAM
420MB Hard Disk
VESA Super I/O & IDE Controller
101 Enhanced Keyboard
1.44MB Floppy Drives
SVGA Monitor
(.28dpi, Multi-Freq.)
1MB VESA SVGA Card
HI-RES Mouse

**$885**

**486DX2-80MHz .....$925**
**486DX4-100MHz.....$995**

# PENTIUM

P5 PENTIUM 60 ....**$1325**
P5 PENTIUM 66 ....**$1425**
P5 PENTIUM 90 ....**$1695**

Mini-Tower Case
8MB RAM
540MB Harddrive
1.44 3 1/2" Drive
101 Enhanced Keyboard
14" Monitor .28 NI
PCI 2MB SVGA Card
(Windows Accer.)
PCI 64 Bit
IDE/IO Controller
Mouse

PENTIUM 60
**$1325**

# Impossible Prices!!!

## Best Quality With The Best Service

**Nobody beats CYGMA system prices & quality**

**SPECIAL OF THE MONTH**

## HYUNDAI MULTI-MEDIA SYSTEMS

### HYUNDAI 486SX-33

4MB RAM
1.44MB Floppy Drive
250MB Hard Drive
SVGA 14" Color Monitor (Hi-Com)
101 Keyboard
Hi-Res Mouse
Creative Multimedia Package
2x CD-ROM, 16 bit Sound, SW, SPK

**$1,095**

### HYUNDAI 486DX2-66

4MB RAM
1.44MB Floppy Drive
420MB Hard Drive
SVGA 14" Color Monitor (Hi-Com)
101 Keyboard
Hi-Res Mouse
Creative Multimedia Package
2x CD-ROM, 16 bit Sound, SW, SPK

**$1,295**

### VESA Local Bus Stations

| | |
|---|---|
| 486DX-66MHz | $395 |
| 486DX-33MHz | $349 |
| 486DX2-50MHz | $365 |
| 486SLC-66MHz | $345 |

NETWORKING EXPERTS–CALL–FOR CONSULTATION

## CYGMA NOTEBOOK SPECIALS

### SCEPTOR

**486 SLC-50 MHz 4MB RAM**
**260MB Hard Drive**
Trackball Built-in
3 1/2" 1.44 Floppy
DOS 6 & Windows 3.1
VGA LCD
Carrying Case

**$1250**

### TOSHIBA

**486SX Enhanced SL33 Mhz**
T-1910
Video & Graphics Accelerator
1.44 I.D.D.
VGA LCD w/64 gray scales
PCMCIA 2.01 type II slot
DOS, Windows

**$1295**

## •MULTI-MEDIA•

### SONY

Double Speed CD-ROM Amplified
Speakers Lab-Tech (pair)
14 CD-TITLES
Smart-CD Pak (speed CD-ROM
up to 30 times)
16-Bit Sound Card (True 16 Bit)

**$229**

### MEDIA-VISION

**ULTRA FAST DOUBLE SPEED**
**CD-ROM DRIVE - SCSI**
SCSI 16-Bit Sound Card
2 Powered Stereo Speakers
Microphone
15 Hot CD-Titles
All Cables

**$249**

### CREATIVE LABS

**Discovery Kit**
Double Speed CD-ROM Drive 320ms
300kb/sec.Sound Blaster 16 bit stereo,
CD quality sound card.Includes Groliers
Encyclopedia, Games & More!
Amplified Speakers Inc.

**$259**

**Ask us about Free-Software Package w/Complete Systems Service, Repair, Maintenance Experts • Ask us about 3, 6, or 12 month interest-free financing (Quick Approval)**

### Monitors

SVGA 14" (.39).....$195
SVGA 14" (.28).....209
SVGA 14" (.28) NON-INTERLACED.....219
SVGA 15" (1280x1024, .28dpi), Low-Rad, Flat.....319
SVGA 17" (1280x1024, .28dpi) NON-INTERLACED.....599

### Hard Disks

250MB IDE DRIVE.....$159
420MB IDE (10.5 m.s.).....185
540MB IDE (12 m.s.).....199
1 GB.....469
2 GB SCSI.....999

### RAM

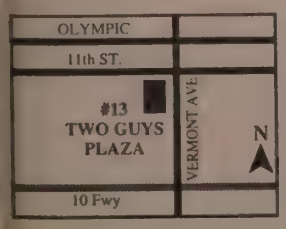
1M TO 2M.....CALL
2M TO 4M.....CALL
1M TO 4M.....CALL
4M SIMM.....CALL
1.2M FDD.....CALL

### Modems & Accessories

MOUSE.....$8
TRACKBALL.....20
MODEM.....29
FAX MODEM.....37
FAX MODEM 14400 BAUD.....65

### NETWORKING SPECIALIST
### Printers & Scanners

PANASONIC 2130.....$225
CANON PRINTERS.....Call
PANA LASER 4410.....489
HP LASER 4 & 4L.....Call
HP DESKJET 500, 500C, 550C...Call
EPSON PRINTERS.....Call




**M-F 9am-7pm Sat 10am-6pm**

VISA MasterCard

**Toll Free Sales Hot Line**
**1-800-700-7331**

# CYGMA COMPUTER

**1133 S. VERMONT AVE. #13 • Los Angeles, CA 90006**
**TECH SUPPORT 213. 368-7331**
**FAX 213. 368-7335**

PRICE BASED ON CASH DISCOUNT • PRICE MAY CHANGE WITHOUT NOTICE • Cygma Is Not Responsible For Any Typographical Errors

# SERVICE SUPPORT QUALITY & PRICE

## PENTIUM
### Intel 64 Bit Pentium Processor

- 256K Ultra Fast Cache
- 8MB RAM Installed
- Intel Math Coprocessor
- 1.44MB FD
- 540MB HD 11ms
- 2S/1P/1G
- Hi-Res. Mouse
- 101 Keyboard (Japan)
- Enhanced IDE PCI FD/HD Controller
- .28 N/I Energy Saving SVGA Color Monitor
- Windows Accelerator PCI Super VGA Card W/1MB
- Clock/Calendar w/B.B.U.
- Operation Manual
- Digital Full Tower Case
- 230 W P/S (110/230V) U.L.
- A.C. Surge Protector
- 14.4/14.4 Fax/Modem

Pentium 60MHz.....$1549
Pentium 66MHz.....$1649
Pentium 90MHz.....$1799

## 486 VESA Local Bus
### Pentium Overdrive for Future Upgrade

- Energy Saving Green Function
- 256K Ultra Fast Cache
- 3 VESA Local Bus Slot
- 4MB RAM Installed
- Built-In Math Coprocessor
- Hi-Res Mouse
- 8K Cache Int.
- 2S/1P/1G
- 1.44MB FD
- 425MB HD 12ms
- 32 Bit VESA Local BusFD/HD Controller
- 101 Keyboard(Japan)
- .28 N/I Energy Saving SVGA Color Monitor
- 32 Bit VESA Local Bus Super VGA Card W/1MB (Windows Accelerator, 1280x1024, 16.7M Color)
- Clock/Calendar w/B.B.U.
- Operation Manual
- Digital Mid-Size Tower Case
- 230W P/S (110/230V) U.L.
- 9600/2400 Fax/Modem

Intel 33/ AMD 40.....$979/ $999
AMD 2-66/ AMD 2-80.....$1019/ $1039
Intel 2-66/ Intel 4-100.....$1049/ $1199

## 486 MULTIMEDIA SPECIAL

- Energy Saving Green Function
- INTEL Pentium Overdrive for Future Upgrade
- 256 Ultra Fast Cache
- 3 VESA Local Bus Slot
- 4MB Ram Installed
- Math Co-Processor Built-In
- 8K Cache Int.
- 2 Serial, 1P, 1G
- Hi-Res Mouse
- 1.44MB FD
- 32 Bit Vesa Local Bus IDE FD/HD Controller
- 425MB HD 12ms
- 101 Keyboard (Japan)
- .28 N/I Energy Saving SVGA Color Monitor
- VESA Local Bus Card w/1MB
- 2X CD ROM
- Stereo 16 Bit Sound Card
- Microphone
- Encyclopedia & 13 CD Titles
- Loaded Multimedia Case: Speakers, Volume, Balance, Treble, Bass, Earp., Misc.
- 9600/2400 Fax/Modem

Intel 33/ AMD 40.....$1229/ $1249
AMD 2-66/ AMD 2-80.....$1269/ $1289
Intel 2-66/ Intel 4-100.....$1299/ $1449

### MOTHER BOARD QTY 10

| | |
|---|---|
| 486SX-40 W/CPU | $94 |
| VLB 486-33/100 W/256K | 79 |
| EISA/VLB 486-33/66 W/256K | 149 |
| Pentium/PCI 60/66 W256K | 149 |
| Pentium/PCI 90/100 W256K | 179 |

### CASE & P/S

| | |
|---|---|
| Digital Mini Tower W/200W U.L. | $34 |
| Digital Med. Tower W/230W U.L. | 54 |
| Digital Full Tower W/230W U.L. | 64 |
| MULTIMEDIA W/230W U.L. | 89 |

### HARD DRIVE QTY 10

| | |
|---|---|
| W D 425MB 12ms IDE | $179 |
| W D 540MB 11ms IDE | 219 |
| W D 730MB 10ms IDE | 249 |
| W D 850MB 10ms IDE | 309 |
| W D 1080MB 10ms IDE | 399 |

### FLOPPY DRIVE

| | |
|---|---|
| 1.2MB TOSHIBA | $39 |
| 1.44MB SONY | 29 |

### MONITOR/ CARD QTY 10

| | |
|---|---|
| Miracle 14" P/W SVGA | $84 |
| Everview SVGA .28 N/I Green | 199 |
| Everview 15" SVGA .28 N/I Green | 284 |
| Supercom 17" SVGA N/I | 549 |
| MGP | 9 |
| HMC 256K SVGA | 23 |
| Windows Acc. 1MB SVGA | 53 |
| Windows Acc. 1MB VLB | 63 |

### KEYBOARD

| | |
|---|---|
| Mitsumi 101/102 Enhanced | $14 |
| Spanish 101/102 Enhanced | 19 |

### NETWORK QTY 10

| | |
|---|---|
| 8 Bit Arcnet Star | $34 |
| 16 Bit Arcnet COMBO | 44 |
| 16 Bit Ethernet Coax | 22 |
| 16 Bit Ethernet Combo | 24 |
| 4 Port Passive Hub | 4 |
| 8 Port ACTIVE HUB | 119 |
| 8 Port 10 Base T Hub | 114 |

### CD ROM

| | |
|---|---|
| 2X SONY CD ROM | $104 |
| 4X TEAC CD ROM | 199 |
| 4X Mitsumi CD ROM | 184 |

*ADD 3% QTY LESS THAN 10
*ADD 10% QTY LESS THAN 5

## DEPOT REPAIR

- Fast, Reliable & Guaranteed
- Volume Accounts, Call For Special Pricing!!!
- Call For Other Depot Solutions To On-Site Maintenance

DATA GENERAL • BLOWER MOTORS • SPINDLE MOTORS • LINEAR MOTORS • R/W HEADS • DISK DRIVES • TAPE DRIVES CRTs • PRINTERS • CPUs MEMORIES • COMMUNICATIONS CAD/CAM • TEKTRONIX • MITSUBISHI • V.M.I. • RAMCOM
PERSONAL COMPUTER • IBM-PC/XT/AT & COMPATIBLE COMPAQ • LEADING EDGE • APPLE • AST • WYSE • LINK

## NOTEBOOKS

### Monochrome

| | |
|---|---|
| 486SX-25M | $1199 |
| 486SX-33M | $1229 |
| 486DX-33M | $1259 |
| 486DX2-66M | $1319 |

### Dual Scan Color

| | |
|---|---|
| 486SX-25C | $1679 |
| 486SX-33C | $1699 |
| 486DX-33C | $1739 |
| 486DX2-66C | $1789 |

### SYSTEMS INCLUDE:

- 4MB Memory
- 210MB HD
- 1.44MB FD
- Battery
- AC Adapter
- Built-in-Trackball Mouse
- Padded Carrying Bag w/Shoulder Strap
- Microsoft DOS 6.22

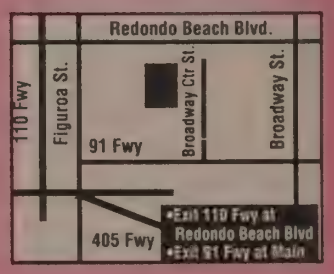
- FULL ONE YEAR WARRANTY
- LIFETIME CUSTOMER SUPPORT
- BUY DIRECT & SAVE

## GATETRONIX Control Systems Inc.

Hardware & Software Services
15541 Broadway Center Street, Gardena, CA 90248
BROADWAY CENTER BUSINESS PARK
(corner of Broadway & 157th St.)

**Tel: (310) 715-6086**
**Fax: (310) 715-6649**

MON-FRI. 9AM-6PM




*All trademarks are acknowledged
**All GCS Systems are fully assembled & tested. Prices subject to change without notice.

## GCS/ALL Micro Services

Valencia Industrial Park
27720 Avenue Scott
Unit 180
Valencia, CA 91355

**Tel: (805) 257-1926**
**Fax: (805) 257-1925**

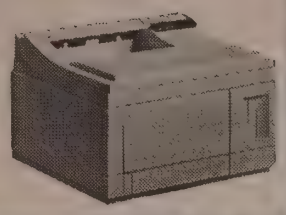
WE DO: NOVELL • LANTASTIC • CUSTOMIZE • UPGRADE

# The Printer Connection

PHONE 714/758-8832 — 1831 West Lincoln Blvd, Anaheim, CA 92801 — FAX 714/635-1752

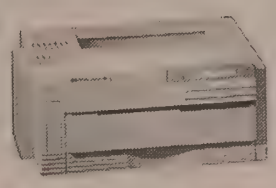
HEWLETT PACKARD

*4 PLUS*
*$1369*



HEWLETT PACKARD

*4P*
*$925*



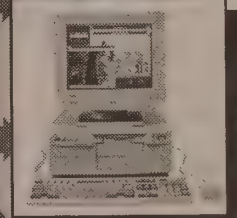
COMPAQ
IBM AST
HEWLETT PACKARD

## Printers

- *HP LaserJet IVL* ..... *$495*
- *HP LaserJet IV V 16 PPM* ..... *$1895*
- *Epson Stylus Color 720x720* ..... *$529*
- *HP DeskJet 540* ..... *$289*
- *HP DeskJet 560C Color* ..... *$479*

Call for prices on many other printers.

***We offer a complete Printer Repair Facility and a large selection of Printer Ribbons***



## AST. *Bravo MS P/60 Pentium*

- 423MB Hard Drive ..... *$1895*

Includes: 8MB RAM, 423MB Hard Drive, 1.44MB Floppy Drive, 256K Cache, 1MB 64Bit Video Controller, DOS, Windows & Mouse, 3 Year Warranty

## AST. *Bravo MS*

**486 DX4/100MHz**

Includes: 8MB RAM, 1.44MB Floppy Drive, Local Bus Graphics w/1MB, Windows, DOS 6.2, Mouse

- 273 W (270MB Hard Drive) ..... $1895
- 543 W (540MB Hard Drive) ..... $2059

**486/66MHz**

Includes: 8MB RAM, 1.44MB Floppy Drive, Local Bus Graphics w/1MB, Windows, DOS 6.2, Mouse

- 273 W (210MB Hard Drive) ..... $1475
- 540 W (540MB Hard Drive) ..... $1595

## AST. *Bravo MS P/90 Pentium*

Includes: 8MB RAM, 1.44MB Floppy Drive, Local Bus Graphics w/1MB, Windows, DOS 6.2, Mouse

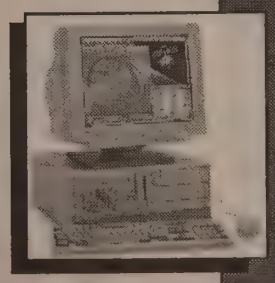
- 543 W (540MB Hard Drive) ..... $2249
- 1003 W (1GB Hard Drive) ..... $2795

## AST. *Premmia MS/90 Pentium!*

NEW

- *540MB Hard Drive*
- *8MB RAM*
- *1MB 64Bit Video Controller*
- *Windows, DOS & Mouse*
- *3 Year Warranty*

*$2295*



GREAT VALUE!

## AST. *Advantage Multimedia System*

4MB RAM, 420MB Hard Drive, CD-ROM, Speakers, Sound Card, Microphone, SVGA 14" Color Monitor, 1MB Video Card, 14.4 Internal Fax Modem, Telephone Answering System, 5 CD Titles Includes: Encyclopedia & Games, Microsoft Works, Quicken Accounting, America On-Line, Prodigy, Winfax, 3 Year Warranty

*$1599*

## AST. *Ascentia Notebooks*

- **Ascentia 910DX2 4/50** ..... $2995
  Dual Scan Color, 8MB RAM, 340MB Hard Drive
- **Ascentia 910DX2 4/75** ..... $3395
  Dual Scan Color, 8MB RAM, 510MB Hard Drive
- **Ascentia 910DX2 4/75** ..... $4595
  Active Color, 8MB RAM, 510MB Hard Drive
- **Ascentia 810DX2 4/66** ..... $2395
  Dual Scan Color, 4MB RAM, 250MB Hard Drive

EXCELLENT FINANCING AVAILABLE!

**HOURS:**

Mon - Fri 8 AM to 6 PM

Saturday 10 AM to 5 PM

One Block West of Euclid

# MICRO MARKETPLACE

Nobody Expect More than This.

BEST BUY. this month Special! 586 speed for 386 price.

## Pentium 90Mhz Multimedia

Intel Pentium 90Mhz & Heat Sink Fan
On Board PCI IDE Controller
256K Cache Memory & Phoenix Bios
8M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
PCI Graphic Accelerator w/1M
Digital Medium Tower Case w/Power
15" Digital SVGA Monitor 0.28mm
101 Enhanced Keyboard
3 Button Mouse & Pad
Double Speed CD-ROM Panasonic
16 bit Sound Blaster Original Card
Amplified Stereo Speakers
CD titles 3CDs w/Encyclopedia

$1,999

## Pentium 60Mhz Multimedia

Intel Pentium 60Mhz & Heat Sink Fan
On Board PCI IDE Controller
256K Cache Memory & Phoenix Bios
8M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
PCI Graphic Accelerator w/1M
Digital Medium Tower Case w/Power
14" Svga NI Green Mtr 28 Full Screen
101 Enhanced Keyboard
3 Button Mouse & Pad
Double Speed CD-ROM Panasonic
16 bit Sound Blaster Original Card
Amplified Stereo Speakers
CD titles 3CDs w/Encyclopedia

$1,699

If this price is for pentium Multimedia, Buy this.

## 4DX2-80Mhz Multimedia

486DX2-80Mhz CPU & Cooling Fan
VLB Green 256K Cache ZIP 5V,3.3V
4M RAM 72 Pin
420MB IDE Hard Drive
3.5" Floppy Drive
32bit I/O & IDE Controller 2S,1P,1G
32bit S-3 Accelerator w/1M
Digital Mini Tower Case w/Power
14" SVGA Monitor 0.28 Dot Pitch
101 Enhanced Keyboard
3 Button Mouse & Pad
Double Speed CD-ROM Panasonic
16 bit Sound Blaster Original Card
Amplified Stereo Speakers
CD titles 3CDs w/Encyclopedia

$1,189

## 4DX2-66Mhz Multimedia

486DX2/66Mhz CPU & Heat Sink
VLB Green 256K Cache ZIP 5V,3.3V
4M RAM 72 Pin
420MB IDE Hard Drive
3.5" Floppy Drive
32bit I/O & IDE Controller
32bit S-3 Accelerator w/1M
Digital Mini Tower Case w/Power
14" SVGA Monitor 0.28 Dot Pitch
101 Enhanced Keyboard
3 Button Mouse & Pad
Double Speed CD-ROM Panasonic
16 bit Sound Blaster Original Card
Amplified Stereo Speakers
CD titles 3CDs w/Encyclopedia

$1,149

## Pentium 90Mhz

Intel Pentium 90Mhz CPU
CPU Cooling Fan & Heat Sink
On Board PCI IDE Controller
256K Cache Memory & Phoenix Bios
8M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
PCI Graphic Accelerator w/1M
Digital Medium Tower Case w/Power
14" SVGA Monitor 0.28 Dot Pitch
101 Enhanced Keyboard
3 Button Mouse & Pad

$1,699

## Pentium 60Mhz

Intel Pentium 60Mhz CPU
CPU Cooling Fan & Heat Sink
On Board PCI IDE Controller
256K Cache Memory & Phoenix Bios
8M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
PCI Graphic Accelerator w/1M
Digital Medium Tower Case w/Power
14" SVGA Monitor 0.28 Dot Pitch
101 Enhanced Keyboard
3 Button Mouse & Pad

$1,499

pentium price w/8M ?

## 4DX2 - 80Mhz

486DX2/80Mhz CPU & Cooling Fan
VLB Green 256K Cache ZIP 5V,3.3V
Upgradable to DX4/100Mhz
4M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
32bit I/O & IDE Controller 2S,1P,1G
32bit S-3 Accelerator w/1M
Digital Mini Tower Case w/Power
14" SVGA Monitor 0.28 Dot Pitch
101 Enhanced Keyboard
3 Button Mouse & Pad

$999

## 4DX2 - 66Mhz

486DX2/66Mhz CPU & Cooling Fan
VLB Green 256K Cache ZIP 5V,3.3V
Upgradable to DX4/100Mhz
4M RAM 72 Pin
420MB IDE Hard Drive
3.5" Floppy Drive
32bit I/O & IDE Controller 2S,1P,1G
32bit S-3 Accelerator w/1M
Digital Mini Tower Case w/Power
14" SVGA Monitor 0.28 Dot Pitch
101 Enhanced Keyboard
3 Button Mouse & Pad

$899

This can't be True

NOTEBook Special!

## 4DX2-66 Color

Intel 486DX2/66Mhz CPU
PCMCIA II & III, LCD Display
Upgradable to DX4/100Mhz
4M RAM Expandable to 32MB
340MB Hard Drive
3.5" Floppy Drive, Removable
32bit VESA Local Bus 1024x768,256
10.4" Dual Scan Color Screen
NiMH Battery 2.5hrs (5hrs w/2nd Batt)
Built in 16bit Sound w/Speaker & Mic
Trackball Installed
Removable Keyboard

$2,299

## 4SLC2/50 Note

486SLC2/50Mhz CPU
4M RAM
200MB Hard Disk Drive
1.44 Floppy Disk Drive
64 Gray Scale Screen
9.5" Diagonal Screen
512K VGA Card
Autoswitchable 100 to 240 VAC
Lightweight 5.7lbs w/Battery
1 Year Warranty
Toll-Free Technical Support
Assured by ISO 9001 Certification

$1,049

## This Month Special-560MB HDD $199

| | | | |
|---|---|---|---|
| 486 VLB Board w/256K ZIP 3 | $99 | 14" SVGA Monitor 0.28mm | $199 |
| 1.2MB Floppy Disk Drive | $44 | 14" NI SVGA Monitor 28 Gree | $219 |
| 1.44MB Floppy Disk Drive | $39 | 15" Digital Monitor 1280x1024 | $319 |
| S-3 32bit VLB Accelerator | $79 | 17" Digital Monitor 1280x1024 | $619 |
| Trident PCI w/1M DRAM | $105 | 9600/2400 BPS Fax/Modem | $29 |
| ATI PCI Mach 32 w/1M DRAM | $109 | 14400 BPS Fax/Modem | $59 |
| ATI PCI Mach 64 w/2M DRAM | $199 | Mini Tower Case Digital LED | $39 |
| ATI PCI Mach 64 w/2M VRAM | $299 | Medium Tower Case w/LED | $59 |
| Panasonic 2X SP CD-ROM | $129 | Desk Top Case Digital LED | $59 |
| Teac Quad Speed CD-ROM | $199 | Big Tower Case w/LED | $79 |
| Sound Blaster 16 Bit Original | $79 | MicroSoft Original Mouse | $34 |
| Network NE-2000 Comp. Card | $49 | MicroSoft New Keyboard | $89 |

*Quality Components / Lowest Price !*

*90 days Same As Cash*

***Financing Available in 10 Min.***

*For Approved Credit Only, Price based on Cash Discount*
*Prices subject to change without notice.*

VISA MasterCard

*Lantastic Network / Accounting*
One Year Parts & Labor Warranty

## CP TECHNOLOGY

12880 Beach Blvd. #C
Stanton CA 90680
Phone 714-894-5063

Fax 714-894-0762
Mon-Fri:9am-7pm / Sat:10am-6pm

MICRO MARKETPLACE

# WHOLESALES TO PUBLIC!

***FREE mouse and Softwares with complete system purchase***

**Professional Accounting System(Real World / SBT )**

## SUPER ECONOMY SYSTEM

| | | | | |
|---|---|---|---|---|
| 386SX-40 $173 | 386DX-40 $193 | SYSTEMS INCLUDE | 486DLC-75 $330 | 486DX2-50 $290 |
| 486DLC-40 $220 | 486SX-33 $264 | Digital Mini Tower Case<br>1MB RAM<br>1.44 MB Floppy Drive<br>Super I/O Controller(1:1)<br>2 Serial / 1 Parallel<br>1 Game port<br>Clock and Calendar<br>Onboard Cache<br>101 enhanced Keyboard<br>Lifetime Labor Warranty<br>1 Year Parts Warranty<br>72-hour burn-in Test | 486DX2-66 $355 | PENTIUM-60 $650 |
| 486SLC2-66 $250 | 486DX-40 $294 | | PENTIUM-66 $670 | PENTIUM-90 $860 |

## COMPLETE VLB/PCI SYSTEM

**MUTIMEDIA SPECIAL**

| 2X Speed CD-ROM | 4X Speed CD-ROM |
|---|---|
| 16 bit Sound Card | 16 bit Sound Card |
| Stereo Speakers | Stereo Speakers |
| $175 | $305 |

Digital Mini Tower Case
4 MB RAM
1.44 MB Floppy Drive
170 MB Hard Drive
14" SVGA Monitor
VESA I/O Controller
2 Serial / 1 Parallel
1 Game port
1 MB VESA SVGA Card
101 enhanced Keyboard
LifeTime Labor Warraty
1 Year Parts Warranty
72-hour burn in Test

| | |
|---|---|
| 486DX2-66 $860 | PENTIUM-60MHz $1070 |
| PENTIUM-66MHz $1170 | PENTIUM-90MHz $1400 |

## NOTEBOOK ON SALE

***WE WILL MATCH ANY ADVERTISED PRICE !!***

### IBM

| MODEL | CPU | DISPALY | RAM | HARD | PCIMCI | PRICE |
|---|---|---|---|---|---|---|
| ThinkPad360 | 486SX-33 | 9.5" Mono | 4/20 | 170 | 1/II or 1/III | 1839 |
| ThinkPad360CS | 486SX-33 | 9.5" Color D/S | 4/20 | 170 | 1/II or 1/III | 2359 |
| ThinkPad360C | 486SX-33 | 8.4" Color D/S | 4/20 | 170 | 1/II or 1/III | 2265 |
| ThinkPad500 | 486BL-50 | 8.4" Mono | 4/20 | 200 | 1/II or 1/III | 2019 |
| ThinkPad510CS | 486BL-50 | 8.4" Color D/S | 4/20 | 200 | 1/II or 1/III | 2490 |
| ThinkPad755CS | 486DX2-50 | 8.4" Color Act. | 4/20 | 170 | 1/II or 1/III | 3612 |
| ThinkPad755CS | 486DX2-75 | 8.4" Color Act. | 4/20 | 170 | 1/II or 1/III | 4166 |
| ThinkPad755C | 486DX2-50 | 8.4" Color Act. | 4/20 | 170 | 1/II or 1/III | 4968 |
| ThinkPad755C | 486DX2-75 | 8.4" Color Act. | 4/20 | 170 | 1/II or 1/III | CALL |

### Texas Instruments

| | | | | | | |
|---|---|---|---|---|---|---|
| 4000EWinDx2/40 | 486DX2-40 | 8.2" Color Pass | 4/20 | 200 | Ext. Opiton | 2123 |
| 4000EWinDx2/50 | 486DX2-50 | 8.4" Color Act. | 4/20 | 200 | Ext. Option | 2866 |
| 4000EWinDx4/75 | 486DX4-75 | 8.4" Color Act. | 4/20 | 340 | Ext. Option | 3849 |
| 4000EWinDx4/75 | 486DX4-75 | 9.5" Color Act. | 4/20 | 450 | Ext. Option | 4497 |
| TM4000M | 486SX2-50 | 9.4" Color Act. | 4/20 | 200 | 2/II or 1/III | 2800 |
| TM4000M | 486SX2-50 | 8.4" Color Act. | 4/20 | 340 | 2/II or 1/III | 3507 |
| TM4000M | 486DX4-75 | 8.4" Color Act. | 4/20 | 340 | 2/II or 1/III | 3806 |
| TM4000M | 486DX4-75 | 9.5" Color D/S | 4/20 | 450 | 2/II or 1/III | CALL |

### TOSHIBA

| MODEL | CPU | DISPALY | RAM | HARD | PCIMCI | PRICE |
|---|---|---|---|---|---|---|
| T1910 | 486SX-33 | 9.5" Mono | 4/20 | 200 | 1/14.5mm | 1419 |
| T1910CS | 486SX-33 | 9.5" Color D/S | 4/20 | 200 | 1/14.5mm | 1945 |
| T1960CS | 486DX2-50 | 9.5" Color D/S | 4/20 | 200 | 1/14.5mm | 2359 |
| T1960CT | 486DX2-50 | 8.4" Color Act. | 4/20 | 200 | 1/14.5mm | 2869 |
| T2400CS | 486DX2-50 | 9.5" Color D/S | 4/20 | 250 | 1/II+1/III | 2859 |
| T2400CT | 486DX2-50 | 8.4" Color Act. | 8/24 | 250 | 1/II+1/III | 3499 |
| T3400CT | 486SX-33 | 7.8" Color Act. | 4/20 | 250 | 1/II | 2799 |
| T3600CT | 486DX2-50 | 8.4" Color Act. | 8/24 | 250 | 1/II | 3699 |
| T4700CT | 486DX2-50 | 9.5" Color Act. | 8/24 | 200 | 1/II+1/16mm | 4269 |
| T4800CT | 486DX4-75 | 9.5" Color Act. | 8/24 | 320 | 1/II+1/16mm | 5389 |
| T4900CT | Pentium-75 | 9.5" Color Act. | 8/24 | 320 | 1/II+1/16mm | CALL |

### NEC

| | | | | | | |
|---|---|---|---|---|---|---|
| VERSA S/33M | 486SX-33 | 9.5" Mono | 4/12 | 210 | 2/II or 1/III | 1699 |
| VERSA S/33D | 486SX-33 | 9.5" Color D/S | 4/12 | 210 | 2/II or 1/III | 1899 |
| VERSA V/50D | 486DX2-50 | 9.5" Coor D/S | 4/20 | 250 | 2/II or 1/III | 2799 |
| VERSA V/50C | 486DX2-50 | 9.5" Color Act. | 4/20 | 250 | 2/II or 1/III | 3559 |
| VERSA M/75D | 486DX4-75 | 9.5" Color D/S | 8/40 | 340 | 2/II or 1/III | 3819 |
| VERSA M/75C | 486DX4-75 | 9.5" Color Act. | 8/40 | 340 | 2/II or 1/III | 5099 |

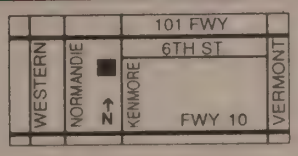
## Pentium 90Mhz Notebook under $4000 SALE NOW!! Limited Offer

## YES!, WE HAVE NETWORK SPECIALISTS

## NA-RAE COMPUTER

3450 W 6th St 110 Los Angeles, CA 90005 (6th and Kenmore)

(213)386-1700 Fax (213)386-1795




ON-SITE/ IN-HOUSE
We DO Personal and Group training

Mon - Sat 9 a.m. - 7p.m. Sun 1 p.m. - 7p.m.

Major Credit Cards Welcome.

Narae Computer is not responsible for any typographical errors

# It took us 6 years to become an overnight success.

To tell you the truth, it is not hard to understand why we've done so well and grown so quickly. From Washington D C. to Chicago and L.A., our organization offers our customers a combination of products, service and experience that's difficult to match. No wonder we have been the salvation of many MIS departments of large corporations.

And an impressive number of important companies and government offices have taken advantage of our vast product line, competitive pricing and reliable service Organizations such as The RAND Corp., L.A. Opinion, Unisys, Newport News Shipbuilding, PRC, EG&G, World Bank, NASA, Wrigley Co., CSC, and many government agencies in Washington D C.

So let us prove it to you, too. We are big enough to handle your large orders and still small enough to give you the service you deserve. Call us!

**Socrates**
computer systems

**310.312.5777**

2242 Purdue Ave.
Los Angeles, CA

Tel. 301.770.1155
Rockville, MD

Tel. 312.455.9604
Chicago, IL

Tel. 804.722.5088
Hampton, VA

## TOSHIBA

***T1960 CT***

- 486DX2-50 MHz Notebook
- 320 MB HD
- 4 MB RAM
- Active COlor SCreen

**$2729**

## COMPAQ

***Contura 400CX***

- 486DX2-40 MHz Notebook
- 250 MB HD
- 4 MB RAM
- Active Color SCreen

**$2995**

## NEC

***Versa S/33D***

- 486SX33 MHz Notebook
- 210 MB HD
- 4MB RAM
- Dual Scan Color Screen

**$1449**

## AST COMPUTER

***Ascentia 900N***

- 486DX2-50 MHz Notebook
- 4 MB RAM
- 340 MB Removable HD
- 10.3" STN Screen

**$2567**

## HEWLETT PACKARD

***Scanjet IICX***

After $150 rebate **$725**

## COMPAQ

***Prolinea Desktop 486DX2-66***

- 420 MB Hard DRive
- 4 MB RAM, 1.44 FD
- 1 MB VLB VGA
- .28DP 14" Color Monitor

**$1695**

## IBM

***From Servers to Notebooks, Solutions with IBM***

## PowerMac 6100/66

- 8MB RAM, 256KB Cache
- 350 MB HD
- 1.44 Floppy Drive
- System 7.5

**$1635**

## AST COMPUTER

***Bravo LC Desktop 486DX2-66***

- 270 MB Hard Drive
- 8 Mb RAM, 1.44 FD
- 1 Mb VLB VGA
- .28DP 14" Color Monitor

**$1595**

## Seagate

***ST 5850A, 854 MB***

- 854 MB IDE
- Low Profile
- 11 ms Access time

**$289**

## WordPerfect

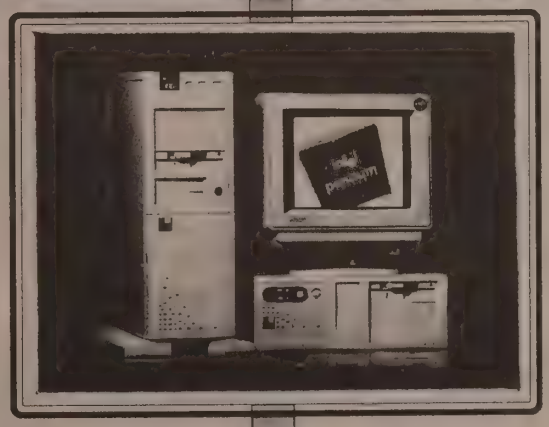
***WP 6.1 For Windows***

**$209**

## *Novell Ceritified Systems*

- ***486DX2-66 MHz***
- 4 MB RAM
- 256KB Cache
- 420 MB HD
- VLB IDE Interface
- 1.44 Floppy Drive
- 1 MB Paradise VLB Video
- 14" .28 SVGA NI Color Monitor
- MS-DOS 6.22 & WFW W 3.11
- Microsoft Mouse
- 101 Keyboard
- Netware tested and approved
- 2 Year Limited warranty

yes NetWare Tested and Approved



**$1195**

## pentium PROCESSOR

- ***Intel 90 MHz Pentium***
- 8 MB Ram (128 MB Max)
- 256KB Cache (Exp to 1 MB)
- *845 MB* Fast ATA HD
- PCI IDE Interface
- ATI MACH 32 PCI Video w/1 MB
- 1.44 Floppy Drive
- 15" .28 SVGA NI Color Monitor
- MS-DOS 6.22 & WFW W 3.11
- Microsoft Mouse
- 101 Keyboard
- 2 Year Limited warranty
- *MS Office Professional*

**$2495**

Prices subject to change without notice. Quantities may be limited. Cash or P.O only.
The logos & trade names listed are registered trade marks of their respective companies.

# Socrates

**computer systems**

310.312.5777

By: Mary Eisenhart
Photos: Michael Jay

GIFTMAKER

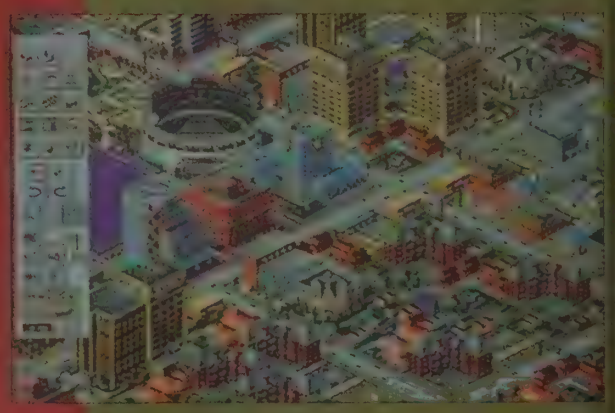
SIMTOWN

# Building SimEmpires

KLICK AND PLAY

## Good Times At Maxis

Back in 1985, hopeful young entrepreneur Jeff Braun sold his consulting business and decided to go into publishing. "I'd decided that I was making a fundamental mistake in that I was making money by addition, by the hour, instead of multiplication, by the unit. 'That's what I'm doing wrong here, I need to become a publisher.'"



SIMCITY 2000

Furthermore, he had his product strategy all figured out—Games For Jeff. As an affluent young professional, he noticed that there appeared to be plenty of people like himself with money to spend on computer games, and also that they were not much attracted by the shoot-'em-ups aimed at the teenage market.

However, not being a programmer, he was not exactly sure of how to acquire games to publish.

So, along with a friend who was in a similar situation with another startup, he hit upon the idea of throwing pizza-beer-and-games parties for technical people. And, on a fateful evening that lives in company legend, he met Will Wright, a friend of a friend of somebody's next-door neighbor.

Wright had, some years earlier, developed an early Nintendo video game called Raid on Bungeling Bay, which involved making helicopter raids on a town and destroying its munitions factories before they built up sufficient weaponry to sink your aircraft carrier. In the process, since he was acting as his own graphic artist, he discovered that building cities was more fun than destroying them.

"So he started on SimCity in 1984," Braun recalls. "At the time, he was a consultant at Brøderbund. He went on and developed SimCity for the Commodore 64 and finished it; Brøderbund decided that because there was no win or lose, it wasn't a game, and they didn't know how to position it. They said, 'It isn't really what we were thinking it would be,' so they turned it down, and Will started working on two other projects."

By the time the famous party rolled around, SimCity was largely forgotten; pressed by Braun, Wright insisted that he couldn't possibly want to look at a game that Brøderbund had already turned down. Braun wanted to see it anyway.

"He shows me SimCity on the Commodore 64," laughs Braun, "and I nearly fall on the floor in shock. He shows me San Francisco having an earthquake, the monster running around, boats going toot-toot-toot, traffic...

"I went ballistic. I said, 'You know, this is a wonderful product. I think I could do something with it.'"

And so it was that Braun and Wright became business partners, spending the next two years running Maxis out of an apartment in Moraga while developing the Mac and PC versions of SimCity.

It shipped in 1989 and was an instant success. Today, out in a new SimCity 2000 version, it is joined by simulations ranging from ant colonies to global environments, as well as creativity products like the recently shipped Gift Maker, which lets users create art for transfer to everything from coffee mugs to T-shirts.

We visited Maxis's Orinda headquarters in January and found Braun in excellent spirits.

∇

**There seems to be a sort of family resemblance among the Sim products in particular and Maxis products in general—how would you define that?**

We like to think it's creativity, ownership, and exploration. The idea is that it's open-ended.

We have three product areas: our simulation entertainment product area; we have early learning—we just shipped SimTown and Widget Workshop, which are the first simulations I know of geared for children. Then we have what we call home creativity, which is Print Artist and Gift Maker.

All three product areas allow you to be creative, whether you're making a greeting card in Print Artist or a T-shirt in Gift Maker or a science experiment in Widget Workshop or in SimTown creating your town or with SimAnt creating your ant colony—all of these have elements of construction. We call it constructivist thinking, sort of a Legos approach to learning. Learn by doing.

We like to call our products sugar-coated vitamins, in the sense that there's real learning. You learn a lot about a city playing SimCity.

**You've got real physics, and real economics...**

That's right, but we sugar-coat it with a game to make it fun. We make it thrilling, in a sense; we make it fun.

All of these products allow you to be creative. They allow you to explore—try this, try that, go check this new idea out, check another idea out. Load in someone else's saved file, and see how that works.

It's about creativity, and because you created it, ownership. It becomes yours. You'll never hear anyone say, "My Mario," "My Myst," "My Tetris," "My Sonic the Hedgehog." They will say, "My city," because they built it. Or "My greeting card."

That ownership creates word of mouth. Once it becomes yours, you don't talk about Maxis, you don't talk about SimCity, you talk about "look at my city and the problems I'm having! There's crime over here and an earthquake over there...." And people get intrigued and say, "I want one!" That's what built the company, ownership and word of mouth.

**Virtual worlds are a real big thing right now, and the Sim products are at least entry-level virtual world construction sets. Do you see that branching into more "serious" simulation products?**

Without a doubt..

We have a company-wide focus, which is to take creativity into many different areas of software. We are exploring a concept for the simulation products which we call SimWorld.

SimWorld could be the next generation of SimCity. We're working on that now, and we see it as a sort of object-oriented paradigm, in the sense that the world is built up of components. You might have a home; and inside the home are furniture and people, and you can arrange those components for interesting behaviors or interesting effect. We're looking at what an immersive SimCity would be.

In the next versions of our Sim products, you might be able to walk through SimCity, drive through SimCity, fly over SimCity—you'll be able to build your city and then get in a helicopter and do the traffic report.

**A couple months ago we did an interview with Neil Young, who was talking about having a virtual cab that let you ride around in the cab of your electric train, checking out the track you laid and the scenery you built...**

I want you to know, we've got that running now!

Speaking of virtual trains—I'll make a plug here—there's a product called A-Train. We loved it so much that we flew to Japan and got the rights and shipped it here in the US—it was a popular Maxis product about two years ago.

Well, we might get the Sony PSX version of A-Train, that could be released here by Maxis. The PSX has released in Japan, but it will release in the US within six months. It's a new CD-ROM-based game machine. You can literally build your rail system and get in the train and drive through the city and see the point of view of you being the conductor of your train.

**All virtual, right—not like what Neil was saying about riding around your actual layout?**

No, you're going to build it just like the game—you lay down the track, and the buildings sort of emerge around the train stations and things like that in A-Train. But when you're done you can get in the train and ride around.

We want to get into this immersive experience where you can not only build your city, but go inside and interact.

SimTower is actually the first example of this. You build a skyscraper; you can have up to sixty-four thousand inhabitants in this tower, of which every inhabitant has a name and an identity. They have a job location and a home location, and you can follow them throughout the tower through their day. So it might be after work, and they're at the movie theater. It might be at work, and they're at their desk, or it might be in the evening and they're home. All this takes place in the tower. There's sixty-four thousand people for you to watch; it's a whole voyeur experience.

SimTower is the beginning of getting inside the buildings, and getting inside the people's minds, and getting inside the social aspects of the simulation.

**How do you build in all that stuff—the science and the economics and sociology and whatnot?**

Oh, that's our little trade secret! [*laughs*]

**Oh, okay...**

[*cracks up*] No, I'm just teasing you!

Actually we use a lot of technologies that are fairly well known to propellerheads and are not well known in the general public. Most people just aren't interested in algorithms to generate behaviors and things like that.

The key technology is called cellular automata. SimCity is broken into a bunch of cells, and the simulator only looks at one cell at a time, but it goes between the cells so quickly that it looks like it's all happening at once, live. Very much like a TV set—on a TV set, there's only one dot on the screen at any one time, but it goes so fast your eye can't keep up.

We do that with our simulations. We're actually only calculating one cell at a time, but we calculate all the cells so quickly that you think the whole environment's coming alive.

**So as the hardware power increases, you guys have lots of things to do with it.**

That's right. So the Pentium is our best friend, and so is the PowerPC, and so is RAM.

CD-ROM didn't really buy us anything, because it's really slow. It's like having a Volkswagen with an oil tanker for a gas tank. It doesn't really help your performance all that much that you've got an oil tanker attached to it. And it's slow.

Whereas you look at the improvement that you get with RISC processors and 32-bit computing—now *that's* something we can make use of. We can do deeper, richer, more complicated simulations.

**Right now hardware is the main constraint on the amount of complexity you can deal with?**

Absolutely. And key to that is performance, because anybody could write a simulation that accounts for everything in the world, but it'll probably run slow. The issue is really performance.

So everything is in our favor.

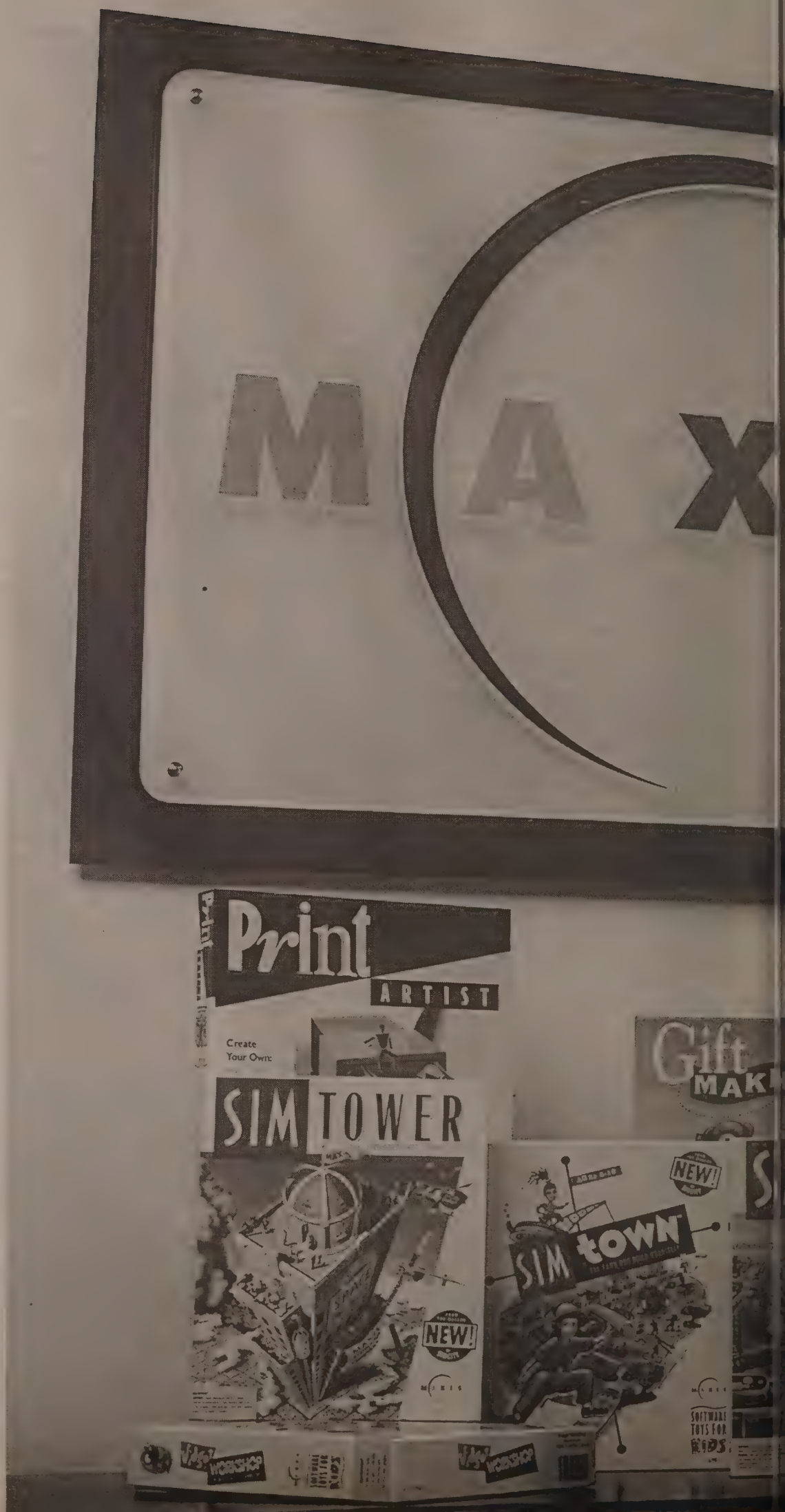
A key for Maxis is the element of reuse. When we look at multimedia, one of the key distinguishing things we see is that most of these are click and watch, or click and listen, or click and experience.

We see those as decision trees. You go to this path and then you get to a location, and you have other alternate paths, and you're sort of navigating or surfing through the tree structure.

Well, we consider our products to be decision *forests*, as opposed to decision trees. Nobody could get to all the trees and all the branches in our simulations, and that creates unlimited reuse, which creates value because people can play our products for many, many hours. As opposed to Myst—when you're finished, you're not going to go in and do it again. Whereas with SimCity, there really isn't any finish—you'll continue to come back in.

**So you built Atlanta—now you can build San Francisco.**

Right, or "I want to build a sleepy little mountain town," or a big high bus lane, or "I want to try no cars," or lots of industry, or no industry. See what happens with all these permutations. So as long as you have an interest, there's always something to go back for.



**[Autodesk Chairman/CEO] Carol Bartz was talking at Dick Shaffer's conference in December, in a general setting where application vendors were generally moaning about the flattening market and the difficulty of competing with Microsoft—**

Let me just make a comment there.

When I started Maxis we had VCs come through. They said we didn't have recurring revenues, and we should really look at the productivity side of the market. They said we were like vegetables—we go bad.

At the time, video games were targeted to teenagers, and they'd come and go.

So now it's a complete reverse, and I say, isn't that funny—all I've been doing is the same thing since 1987, and I've gone from being a vegetable to being the king of the mountain, and I haven't changed anything.

The whole market has turned around.

**What she was saying was that now productivity is essentially building stuff. Whether it's ultimately building real stuff, as with AutoCAD, or virtual stuff, as with 3D Studio, the wave of the future is essentially building stuff.**

That's right. It's enabling.

What good is a computer if you're just going to use it as a VCR?

**Or a typewriter?**

Or a book? Guess what, I can go to the bookstore and get a book. I don't need to get a CD and make it into a book like this Voyager book thing. I like books. I don't need to read on a computer, and it makes my eyes go cross-eyed anyway.

You use a computer for what it can do that other things can't.

The way I like to put it is that everybody loves to drive the car by looking in the mirror. But if you do that too much you're going to hit a wall. At some point you've got to look forward.

You can't constantly say, "Well, books are successful so I'll put a book on a CD." Or "Videos are successful, so I'll make cinematic CDs." You have to say, "I'm going to do something that no one else has done because I'm going forward. I'm not running my business because of the past."

**It's like having photography trying to be oil painting.**

Photography's very rich, and oil's very rich, but they're different.

Until Cecil B. DeMille, for all the movies, they would take a camera and film the stage. They didn't move the camera. The camera didn't pan. Because up until then, plays were how you did entertainment. So when they

introduced the new technology, there was no science of moving cameras around.

That's the same as what's going on here. You can't do simulation in a book. You can't do simulation with video. The only way you can do it effectively is by getting together and saying, "Let's pretend, and we'll pretend whatever we want to simulate," or you use a computer. Those are your alternatives.

So I'm using the medium for what it's specifically suited for. Why would I want to take a video and put it on a CD? It's very good off a videotape. And it's cheaper. And faster. And a three-year-old could use it. So why is it that we want to use a computer for this stuff?

Creative applications are uniquely suited to the computer. It's an enabling medium. You don't become interactive to be told what to do. Video is *telling*. Books are *telling*, lectures are *telling*. These are all linear media—they have a beginning, a middle, and an end.

Who would want to go interactive and be told what to do? Most people don't like to be told what to do, not children, not adults. We love hearing stories, but we have media that are very effective for telling stories. What the computer is effective for is interacting—me and whatever's on the computer, me manipulating what's in there. That's creativity. It's me. It's my Rorschach test. I'm taking this fuzzy data and turning it into something that's personally meaningful for me.

This is a medium that allows me to create. I couldn't build a city without this computer. We would have to sell an enormous amount of buildings and parts and things that would fill a huge box, to let you kind of play. And even then, there wouldn't be earthquakes or fires—that would be dangerous.

So what we're doing is we're focusing on enabling technologies. We can enable people. I'm not a mayor, but I can run a city. I'm not an artist, but with Print Artist I can create great things. I'm not a T-shirt printer, but with Gift Maker I can make these wonderful neat T-shirts, and *I* did it.

We're just experimenting. This is my little sandbox.

Everyone talks about the future of online. Eventually it comes down to online merchandising where you're going to buy things online—everyone talks about how the TV show will be going on and you say, "Gee, I like that sweater he's wearing," and you click on it and it says, "Get it from Sears, and here's how to order it right now." And you go and you buy it, and then you're right back in the TV show. And it's delivered to your door.

That's their idea of the future of home buying. Well, that's interesting, but I think what's much more interesting is Gift Maker, where I can take my own favorite images and graphics, and maybe I could surf the Net for beautiful images of Hawaii. Or I'm interested in cats, or I'm interested in sports. I can grab images that interest me, and then I put those on the T-shirt with my own message. And it gets printed and delivered to me.

Now, isn't that a lot better?

I saw that they have this thing where they put people in a room, and they put out their arms and a laser scans them perfectly, for your body measurements. Then you'll have a disk that's your body, 3-D. So when you buy pants or something, you'll send them your body shape and the pants will be sewn specifically to the shape of your body.

**Levi's is doing that.**

Right.

It's not shopping online that's important, it's customized shopping online. Because we can *do* that. You couldn't do that before.

Once again, when people look at online, they're driving by looking in the mirror. They're saying, "Oh, we used to buy things in stores, so in virtual reality, we'll buy them in virtual stores." They're not thinking that there are some things you could do here that you couldn't do before.

What's important is trying to innovate and decide not what was, but what could be. And that's what we're really wrapped around here.

All of a sudden we're offering tools like Klick & Play. I'll pitch a product here—Klick & Play is the first product where you can build your own video game as a consumer. It's a game editing system, but there's no programming. It's object-oriented, and you just place them and let them go, and create your own game.

Once again, we're giving you tools to create.

Now the genius thing about giving people tools to create, to take a diversion, is the reuse. People will not play Myst three times, but you'll use Klick & Play forever. It becomes a lifetime experience.

You get people involved in activities that are creationist, and the reuse goes on forever. We're very much in the nonlinear—there's no beginning, no middle, no end. It's nondirectional—you go in with your own decision and decide your objectives. It creates a very rich and broad environment for these people.

Now people don't want to create unlimited. You put someone in front of a piano, and they won't have a clue. Or you put someone in front of 3D Studio, and say, "Make something really cool," and they're going to be blank. So we provide sample cities, and sample artwork, and sample things, and say, "Start with this."

There's sort of a continuum we work with, where on one end it's completely open-ended and creative and you go too far, and on the other end, it's completely linear and you're being *told*, and there's no interaction. Where we're aiming is somewhere in the middle, where you're being helped and guided, but you're allowed to be creative; where there's a little bit of guidance and a little bit of creativity.

**Ten years ago there were things like Pinball Construction Set. Is it simply a bandwidth issue that you're capable of doing things that are so much more sophisticated now?**

The thing is that the CPU, as it becomes powerful, can do more things. Macromedia Developer is almost getting to the point now where people could do it themselves; Klick & Play is Macromedia Developer for everybody. The truth is that when you start offering ease-of-use features and making it simpler and less open-ended and less propellerheads, it actually takes more CPU cycles.

**It's like Mac versus DOS.**

Exactly. So as the computers advance, the creativity and potential for making it easier for people to create advances. It opens up the market. It's absolutely key and tied to the whole process—improvements in hardware equalling improvements in the capability for us to deliver products that allow this creative interaction.

**So what are the social ramifications of all this Sim-stuff? What's it teaching the new generation?**

**Sometime during the Gulf War, someone went and did an interview with [Spectrum Holobyte's] Gilman Louie, in the course of which it came to light that the military powers that be were just thrilled at the quality of the recruits they were getting, because all these eighteen-year-olds had grown up with Gilman's flight simulators, and they were really good. So the interviewer asked whether it bothered Gilman that his games were such a significant contribution to this process of dehumanization and desensitizing—hitting a building in Baghdad was just another pretty explosion on the screen, another hit point, despite the fact that real people were getting blown to bits in the process. The interviewer wanted to know whether Gilman had an ethical problem with that.**

No, I don't think he did.

**It seemed like no one had asked him that question before.**

So what do I think about it?

Well, my funny story is I had a young kid who lived next door to me in the early '80s. I've always been a computer nerd; I'm not a programmer but I love technology. I had one of the very first Apple IIs, and this kid would come over and want to play computer games. Which I was happy to do because I had

*continued on page 161*

# Computerlane Inc.

Corporate Accounts Welcome.
Volume Discounts
(Export Available)

818-884-8644 & 213-625-7325 • FAX: 818-884-8253
7500 Topanga Canyon Blvd., Canoga Park, CA 91303
Hours: Monday - Friday 9-6 • Sat 10-5

Prices reflect 5% Cash Discount
Prices are subject to change without notice
Not responsible for typographical errors

## IBM

Think Pad 755CS DX2/50 4/340MB . . CALL
Think Pad 755CS DX2/50 4/540MB . . CALL
Think Pad 755CS 75MHz 4/340MB . . .CALL
Think Pad 755CS DX2/50 4/540MB . . CALL
Think Pad 755C 75MHz 4/340MB . . . .CALL
Think Pad 755CSE DX4/100 SERIES . .CALL
Think Pad 755CE DX4/100 SERIES . . .CALL
Think Pad 755CD DX4/100 SERIES . . CALL

**NEW RELEASE!**

PC 300 CX2/50 4/270MB . . . . . .$1175
PC 300 CX2/66 4/270MB . . . . . .$1250
PC 300 CX2/66 8/540MB . . . . . .$1850
PC 330 P60 8/540MB PCI . . . . . .$2299
PC 700 P/90 16/540MB SCSI . . . . . .$3399
PC 700 P/90 16/1GB SCSI . . . . . .$3999

**SERVERS**

PC Server 300 Series . . . . . .CALL
PC Server 500 Series . . . . . .CALL

**PS/2 MODELS**

PS/2 9577ANG DX/2/66 8/527MB . . .CALL
PS/2 9577ONF DX/2/66 8/400MB . . . .CALL
PS/2 95953 5/66 16/3GB . . . . . .CALL

WE CARRY ALL IBM PRODUCTS

## SPECIAL DEAL!

**IBM THINK PAD 360C & 360CSE**

SX/33 & DX2/50MHz
DOS, Windows, PCMCIA,
Built-in Mouse
360 170MB Mono
**$1850**

360CS 340MB Passive Color . . . . . .$2650
360C 340MB Active Color . . . . . .$2780
360CSE 340MB Passive Color . . . . .$2884
360CE 340MB Active Color . . . . . .$2930

## NOVELL

**3.12**
5/10 User . . . . . CALL
25/50 User . . . . . CALL
100/250 User . . . . . CALL
**4.02**
5/10 User . . . . . CALL
25/50 User . . . . . CALL
100/250 User . . . . . CALL

Novell Authorized Reseller

Installation/Set-Up/Training Free Estimate!

## ACS SUPER SAVINGS!

**ACS** 486 SLC2/66 . . . . . .$1096
**ACS** 486 BLC 3/75 . . . . . .$1131
**ACS** DX2/66 . . . . . .$1245
**ACS AMD** DX2/80MHz . . . . . .$1234

- Desktop/Mid Tower Case • 4MB RAM
- 420 MB Hard Disk • 1.44MB Floppy Drives
- SVGA Monitor, .28 1024x768 (256)
- IBM 1MB VLB Video Sky Eagle
- 101 Keyboard & Mouse
- Microsoft Compatible Mouse
- MS DOS & Windows 3.1 (w/Manual & Disk)

## ACS ADVANCED SYSTEMS

ACS IBM 486/DX/4 100MHz . . . . . .$3718
ACS INTEL 486/DX/4 100MHz . . . . .$3846
ACS INTEL Pentium 90MHz . . . . . .$4019
ACS INTEL Pentium 100MHz . . . . . .$4218
Above Systems Include:

- Mid Tower Case • 16MB RAM
- 1GB IDE HARD DRIVE
- ATI GRAPHICS PRO TURBO 4MB Video Card
- 32-bit PCI IDE Controller
- Enhanced 101 Keyboard
- DOS 6.2 & Windows 3.1 (w/Manual & Disk)

## MANAGER'S SPECIALS

### HP VECTRA VL2 DX2/66
**MultiMedia Communication PC**

- 8MB, 540MB Hard Disk
- PCI Bus, Integrated 10 base-T network Card
- Double Speed CD-ROM
- HP Office Card +14.4 Fax modem
- 16-bit sound cards, phones
- Telephone Answering System, DOS
- Windows, Mouse, MS Works, MS Encarta
- MS Money, MS Golf, & Fax works

**$2199**

### COMPAC PROLINEA
**DX2/66 CDS**

- Mid Tower Case 8MB RAM
- 420MB Hard Disk, 1.44 Floppy
- DOS, Windows, Mouse, Tabworks
- Double Speed CD Drive
- Speakers, Sound Card, MS Works
- MS Money, MS Encarta, MS Golf
- Many More Titles!
- Compaq 14" SVGA Monitor .28 1027x768

**$1945**

## CD-ROMS

**CHANGERS:**
Pioneer 2x 6 Disk . . . . . .$499
Pioneer 4x 18 Disk . . . . . .$2050
**KITS:**
Diamond 500D . . . . . .$525
Media Vision 1100 . . . . . .$230
Creative Edutainment . . . . . .$425
NEC 2 vdx . . . . . .$299
**DRIVES:**
NEC 2x/4x . . . . . .$185 / 399
Toshiba 2x/4x . . . . . .$285 / 325
Teac 4x . . . . . .$299
Piextor 4x . . . . . .$435
Panasonic 2x . . . . . .Save!
Sony 2x/2x SCSI . . . . . .$195 / 199

## DRIVES

**TAPE BACK-UP:**
Jumbo 120/250 . . . . . .$113 / 159
Trakker 250/700 . . . . . .$179 / 310
Conner 420/850 . . . . . .$185 / 285
Power Tape 2GB . . . . . .CALL
Wangtek 525/1GB . . . . . .CALL
Wangtek 4GB 4mm . . . . . .CALL
Exabyte/Mountain 4/8GB . . . . . .CALL
**OPTICAL DRIVES:**
Fujitsu . . . . . .CALL
Sony 1.3GB SMO-F521/M . . . . . .CALL
Sony 1.3GB RMO-F570 . . . . . .CALL
Pinnacle internal . . . . . .CALL
Pinnacle external . . . . . .CALL
IBM . . . . . .CALL
HP . . . . . .CALL

WE CARRY ALL BRANDS!

## HEWLETT PACKARD

HEWLETT PACKARD

### NOTEBOOKS

*OMNIBOOK 600C DX2/50 4/170MB/260MB . . . . . .CALL / $2750*
*OMNIBOOK 600C 75MHz 4/170MB/260MB . . . . . .CALL / $3250*
*OMNIBOOK 4000C DX2/50 4/260MB/520MB . . . . . .$2899 / $3599*
*OMNIBOOK 4000CT DX4/100 8/340MB/520MB . . . . . .$4999 / $5399*

***Desktops & Towers:***

*VECTRA VL2/66e 8/340MB . . . . . .$1299*
*VECTRA VL2 DX4/100 8/540MB . . . . . .$1850*
*VECTRA XU 5/90 8/540MB . . . . . .$3050*
*VECTRA XU 5/90C 16/340/540MB SCSI + Matrox . . . . . .$3750*
*VECTRA xi 5/90C 16/1GB SCSI + Matrox . . . . . .$4150*

***Servers:***

*NETSERVER LC Series . . . . . .CALL*
*NETSERVER LF Series . . . . . .CALL*
*NETSERVER LM Series . . . . . .CALL*

### PRINTERS

*HP DeskJet 320 . . . . . .$290*
*HP DeskJet 540 . . . . . .$285*
*HP DeskJet 560C . . . . . .SAVE*
*HP DeskJet 1200C . . . . . .$999*
*HP DeskJet 1200C /ps . . . . . .CALL*
*LaserJet 4L . . . . . .CALL*
*LaserJet 4M Plus . . . . . .$1840*
*LaserJet 4M . . . . . .$1355*
*LaserJet 4P . . . . . .$915*
*LaserJet 4V/4MV . . . . . .NEW*
*LaserJet 4Si . . . . . .$2799*
*LaserJet 4SiMX . . . . . .$4140*
*HP COLOR LASER PRINTER . . . . . .CALL*
*SCAN JET IICX . . . . . .$889*

• QUANTITY DISCOUNTS • ALL PRINTERS IN STOCK

## COMPAQ

**NOTEBOOKS:**
LTE Lite 4/40C 4/170MB
LTE Lite 4/40CX MHz 170/340MB
LTE Lite 4/75 MHz 340/510MB
**PROLINEA SERIES:**
Prolinea DX2/66 8/525MB
Prolinea DX4/100 8/525MB
**DeskPro SERIES:**
DeskPro XL 4/66M, 8/525MB
DeskPro XL 5/60M, & 5/66 8/525MB
**SERVERS:**
Prosignia VS Series
Prosignia 500 Series
Prosignia 1000 Series
Prosignia 2000 Series
Prosignia 4000 Series
Prosignia 1000 Rack Series

IN STOCK

## MOTHERBOARDS & DRIVES

IBM SLC 2/66 + Math Co. . . . . .$180
IBM BLC 3/75 + Math Co. . . . . .$225
INTEL 90MHz CPU + Board . . . . . .$945
INTEL DX2/66 CPU + Board . . . . . .$325
420/540MB Disk . . . . . .$199 / 230
850/1GB Disk . . . . . .$350 / 499
1GB Fast SCSI . . . . . .$540
2GB Fast SCSI . . . . . .$980

Call For Quantity Discounts

## MONITORS

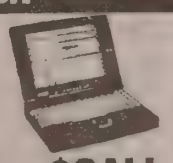
NEW! NEC 15XE . . . . . .$535
NEW! NEC 17XE . . . . . .$985
NEW! NEC 21XE . . . . . .$1950
VIEWSONIC 15 15" . . . . . .$399
VIEWSONIC 20"/21" . . . . . .$1399 / 1650
CTX 15"/17" . . . . . .$325 / 599
SONY 15"/17" . . . . . .$429 / 935

## PRINTERS

OKI ML 320/321 . . . . . .$289 / 410
OKI ML 590/590 . . . . . .$440 / 585
OKI OL 410e/410 . . . . . .$645 / 520
OKI 810/830 . . . . . .$880 / 1075
Epson Stylus . . . . . .SAVE
CANON BJC 600C . . . . . .SAVE

## TOSHIBA

- 4900CT: The Advanced MultiMedia Notebook
- 75MHz Intel DX4
- MultiMedia Ready
- Mic & Speaker
- Windows Sound System
- Many Extras!



**$CALL**

**T3600CT**
• 250MB
• ACTIVE COLOR
CALL

**T4700CT**
• ACTIVE COLOR
• 320MB
CALL

**T1960CT**
• DOS, WIN, MOUSE
• ACTIVE COLOR
200MB . . . .CALL
320MB . . . .CALL

**T1960CS**
• DOS, WIN, MOUSE
• COLOR
200MB . . . .CALL
320MB . . . .CALL

**T3400**
• 4.1 Lbs
• Monochrome
120MB..BEST DEAL!

**CALL US FOR THE BEST PRICES ON ALL NOTEBOOKS**

**T4800CT**
• 486DX
• Active Color
510 MB . . .CALL

**T1910CS**
• DOS, WIN, MOUSE
• MONO/COLOR
200 MB . . .CALL
200MB CS CALL

**T2400CT**
• DOS, Win, Mouse, SCSI
• 486 DX2, Active Color
250MB . . . .CALL
320MB . . . .CALL

**T4700CS**
• 50MHz, 486DX2
• Color, 2 PCMCIA
200MB . . . . . SAVE
320MB . . . . . SAVE
(*Factory Refurbished)

Apple® Macintosh® CITIZEN EPSON Panasonic COMPAQ Microsoft Texas Instruments TOSHIBA SHARP ZENITH data systems IBM AST ALR OKIDATA NEC Hayes WordPerfect® U.S. Robotics Zoom

plenty of them, and I liked seeing them through his eyes, so I would go out and buy games for him.

They ended up moving away, and I hadn't heard from them for a while, and it was the Gulf War, literally. I ran into his mother at the grocery store, and I asked, "How's the kid?" I hadn't seen him in maybe six years. She goes, "Well, remember those video games?"

He's in the Army. He's the guy who does the TOW missile. It's got a joystick—it's a wire-guided missile, so while the missile's flying there's literally a wire attached all the way back—and he guides it into the tank. She said, "It was exactly because of the time you spent with him that he became one of the very best in the military TOW missile specialty." He's incredibly good, and he was good from the beginning.

She told me this, and I had a feeling of "My God, what did I do?" Innocently by taking care of this nice kid, I'm almost responsible for being a killer?

So not only is it an idea, I had it happen to me for real.

There was an article by Russell DiMaria reprinted in the *Chronicle* a while ago. It said, "Doom isn't bad, Mortal Kombat isn't bad; it's a mirror of society." That it wouldn't sell the way it sold if people didn't somehow resonate with what was happening in there.

So to blame the developers is like blaming an individual for the ills of society. They didn't create the demand for blood and guts—the public demanded that. It's a reflection of our society.

**You can choose to make your money that way or not.**

Exactly, but it is a reflection of society. And it's up to people to determine what they want to get out of it.

I agree with that. I don't think that the developers that do these violent products are bad in any sense. I think that they are a reflection of our society.

I think that these rating systems are crazy—did you know that Nintendo refused to use the word "kill" or ever have any blood in their Nintendo games, but now that they have ratings their first game is called "Killer Instinct" and has blood all over it? Because now they can put a rating on it and get away with it.

What it did was it justified the whole thing. Whereas before you felt a little bit guilty for doing violent games, now you just slap a rating on it and you remove your guilt.

My thing is if you're going to rate anything, you ought to rate how easy it is to use. Have a nerd with a band-aid around the glasses—that means you better stay away if you're not a propellerhead; and another one that has, like, a baby. I think that's much more important, because ease of use is a much bigger issue for me than content at this point, when you're building a market.

Maxis believes that Mortal Kombat is an educational title. How 'bout that? It's not that it's not educational, it's that it's *too* educational! It's teaching you things you don't want people to learn. If there was Murder 101, Mortal Kombat would be the first thing you'd want to have—it tells you how to rip out the heart and how to do a karate kick and a kick in the side of the head... You know what I mean? It's teaching you violence and death.

Mortal Kombat teaches killing, and Reader Rabbit teaches English or whatever. It's not that it's not educational, in fact, the reason that the whole rating thing happened was that it was too educational—these kids were starting to rip each others' hearts out. There's these examples of kids killing other kids and saying, "I saw it on Power Rangers."

What we're thinking at Maxis is that fundamentally play is learning. In humans, play is not considered learning, but if you talk to scientists that study mammals, any time they talk about play in reference to wolves or dogs or lions or whatever, it's in relation to learning. They're fighting, they're doing territorial things. They're learning by playing.

Play is learning in a safe environment. So children will play in the activities they're curious about.

The reason boys play war is that they're curious about it. It's a very serious, very deep, very meaningful, very much etched-in-our-hearts kind of activity. Kids pick up on it really young, and they would like to learn about it. Killing each other? Battling over *what*? It's a deep emotional thing in our psyche. Kids want to learn about it. Sex, same thing. They want to learn about it. The more you hide it, the more they think there's something there. Drugs? I can't do it? Then get me some!

We think play is learning. So we think that Mortal Kombat is learning, we think that Doom is learning, we think that all these products that people hate are learning.

We also think SimCity is learning. We also think that Mario is learning—in Mario you learn that if you hit your head on this rock and stars fly out and you collect the stars and get to the bonus round, you get extra lives. That's learning. Whether it's valued or not... it's not.

**There was a discussion of this sort of issue on The WELL in which a parent said, "My kids play Nintendo and they're learning all the time. They're not learning school subjects, but they're learning patience, they're learning to retry, they're learning to think in layers. They're learning not to be afraid of failure. And all that is valuable."**

Exactly! Patterns. Cycles. That's exactly true, you have to remove yourself from the content and look at the process and the activity. So at Maxis we think we're a learning software company, but we also think, so is Acclaim. We think the most effective learning application is learning by doing. And what our simulations and games allow you to do is *do*. I could sit here until I'm blue in the face telling you all these things that you're going to memorize, and you'll know them all, but you won't have learned.

You can tell a kid all you want, "Don't put your hand in the fire. Don't put your hand in the fire. Don't put your hand in the fire." That's not learning. What that's really saying is "Check it out!" But when you put your hand in the fire the first time and you burn yourself, that's learning for life. You will never do it again.

But you'll always do it once. And the reason is, nobody believes anybody else. Everyone believes experience, and experience you believe 100%.

To have a really true learning experience, you don't need somebody sitting there lecturing to you telling you what your experience and your knowledge should be; you need to find out for yourself. So you need to create an environment where people can discover that if you have too much industry you'll have too much pollution, but if you have too little industry you won't have jobs. It's about tradeoffs, and it's about balance, and it's about cause and effect.

Those are very difficult-to-teach concepts with linear media which tell. You don't go interactive to be told. I'll just watch a video or read a book for that—why do I need a computer? What I'm using a computer for is to create, to mold.

We're the leaders, if you ask me, in nonlinear, *doing* software. There is no goal here. When you get Print Artist, we don't say, "Your goal is to get to the end and save the princess." The goal is to please yourself. The goal is to create something that you appreciate for yourself. What's the goal of SimCity? To build the city that's your dream. It's a reflection of who you are. It's a Rorschach test.

Our goal is to give you an environment to create in. And then you can use those tools to create your vision.

**I've heard a lot about your Sim products being used in education.**

All the time.

There's two major trends in education now. One is learning by doing; the other is interdisciplinary studies, where they take a concept and carry it through math and science and reading. Like the Oregon Trail—you look at it from the standpoint of carrying supplies, or from a social standpoint of how families survived going across, or from the point of view of all the artists that were involved in creating the images that we have.

So we, in a noncurricular fashion, have ended up with products that meet both those needs. We cover a lot of different areas on a single subject—we have

# LET'S MAKE A DEAL!!!!

## ONE OF A KIND ITEMS OPEN BOXES, UN-USED NOTEBOOKS:

AST PREMIUM EXEC 386SX/25C 4/80 . . . . . **$799**
AST ADVANTAGE EXPLORER 486SX/25 4/120 . . . . . **$799**
AST ADVANTAGE EXPLORER 486SX/25 4/170 . . . . . **$899**
AST POWER EXEC "SE" 4/25 REM HD 4/200 . . . . . **$1199**
AST COLOR PLUS 486 4/200. . . **$2199**
AST COLOR PLUS 486SL/33 REM HD/ACTIVE 8/343 . . . . . **$2699**
AST ASCENTIA DX/4 75 COLOR ACTIVE 10.4" REMOVABLE HD8/510 . . **$3995**

COMPAQ LTE LITE 386SX-25/ACTIVE B&W 4/80. . . . . **$799**
COMPAQ LTE LITE 386SX-25/ACTIVE B&W 4/120. . . . . **$999**
COMPAQ CONTURA 4/25C 4/120 . . . . . **$1299**

TI TRAVELMATE 4000E 486SX-25 COLOR 4/120 . . . . . **$1099**
TI TRAVELMATE 4000E 486DX-2 50 ACTIVE CLR 4/200 . . . . . **$2199**
TI TRAVELMATE 4000E 486DX-4 75 ACTIVE CLR 4/340. . . . . **$2499**
TI TRAVELMATE 4000M 486SX-2 50 COLOR 4/200 . . . . . **$2299**

TOSHIBA T1900 486SX-20 4/120. **$899**
TOSHIBA T1950 486DX-2 40MHZ 4/120 . . . . . **$1099**
TOSHIBA T1910CS 486SX-33 4/200. . . . . **$1399**

## DESKTOPS:

TOSHIBA T8500 386 BUILT-IN SCSI 4/0. . . . . **$299**
AST PREMIUM II 486SX-20 MODEL 3V 4/0. . . . . **$499**
MAC IISI 68030-25MHZ 3/40 . . . **$599**
MAC LC520 - BUILT IN MONITOR/CD 5/80 . . . . . **$999**

## MONITORS

RADIUS PIVOT - FULL PAGE 15". . . **$499**
RADIUS COLOR PIVOT - FULL PAGE 15" . . . . . **$699**

## PRINTERS

STAR XR-1520 PRINTER 9-PIN/132 COLUMN/420 CPS . . . . . **$199**
CANON BJC 600 - COLOR/ 600 DPI . . . . . **$399**

## TOSHIBA

T4700CT*
486DX-2 50 COLOR ACTIVE
8MB/320MB . . . . . **$2799**

T4900CT
NTEL 75MHZ MOBILE PENTIUM
10.4 ACTIVE MATRIX
8MB/810MB **.CALL FOR BEST PRICE**

T4800CT*
486DX-4 75MHZ LOW POWER CONSUMPTION 8MB/500MB **.$3799**

T1910*
486SX-33 COLOR VGA 4/200 **$1199**

T1910CS*
486SX-33 COLOR VGA 4/200 **$1499**

T1960CS*
486DX-2 50/ACTIVE COLOR VGA 4/200 . . . . . **$1849**

T1960CT
486DX-2 50/ACTIVE COLOR
4/200 . . . . . **$2399**
4/320 . . . . . **$2599**

T3400CT
486SX-33/Active COLOR
4.4LBS. 4/250 . . . . . **$1999**

T3600CT*
486DX-2 50MHZ ACTIVE COLOR
8/250 . . . . . **$2699**

T4700CS*
486DX-2 50 BUILT-IN SOUND
8/200 . . . . . **$2399**

T4800CT
486DX-4 75MHZ ACTIVE
COLOR/SOUND 8/500 . . . . . **$4199**

## APPLE

*MOST COMPETITIVE RESELLER IN SOUTHERN CALIFORNIA*

### POWERBOOKS:

150 4/120 . . . . . $1299
520 4/160 . . . . . $1749
520C 4/160 . . . . . $2249
520C 12/320/MOD . . . . . $2999
540C 4/320 . . . . . $3249
540C 20/500/MOD . . . . . $4499

### POWERMACS:

6100/60 8/250/CD . . . . . $1549
6100/66 8/350/CD . . . . . $1869
6100/66 16/500/DOS . . . . . $2599
7100/66 8/500/CD . . . . . $2149
7100/66 AV16/500/CD . . . . . $2749
7100/808/700/CD . . . . . $2799
8100/8016/1 GIG/CD . . . . . $3599
8100/10016/700/CD . . . . . $3899
8100/100 AV16/1 GIG/CD . . . . . $4399
8100/11016/2GIG/CD . . . . . $5999
APPLE 300E PLUS CD . . . . . $299

## SONY

15SF . . . . . $439
17SF . . . . . $859
17SE1 . . . . . $999
2036* . . . . . $1399
20SE1 . . . . . $1799

## NEC

XE 15" . . . . . $559
XE 17" . . . . . $949

LA COMPUTER CENTER

**(310) 479-0999 • FAX (310) 312-9041**

**12002 Pico Blvd.**

*(Take the 10 West, Exit Bundy, turn right on Pico, 1 block on the right)*

Prices subject to change without notice. All prices are cash discounted.

# WEST TECH COMPUTERS
## Wholesale to the Public

**TEAC 4x Internal CD-ROM $169**

**CONNER 540 MB HDD $169**

**US ROBOTICS Sportster 14.4 Internal D/F Modem $89**

**CONNER 420MB Internal Tape Backup $159**

**ATI Mach 64 VLB or PCI 2MB Accelerator $159**

**WESTERN DIGITAL AC 31000 1GB IDE HDD $369**

## SYSTEM SPECIALS

### 486 VLB STAR

**Intel 486 DX2-66 ..... $899.00**
**AMD 486 DX4-100 ..... $999.00**
**AMD 486 DX4-100 ..... $999.00**
**Intel 486 DX4-100 ..... $1049.00**

- Intel Pentium Technology Ready
- OPTI 486 VLB MB w/256K Cache
- 4 MB Ram (70ns)
- 1.44 FDD 3.5"
- 32 Bit VLB IDE (2S, P, G) Controller
- 32 Bit Window Accelerator w/1 MB
- Dos 6.22 and Windows 3.1, Add $85
- 540 MB IDE HDD
- Mini Tower Case
- 14" SVGA Monitor
- 101 Key Keyboard
- High Resolution Serial Mouse

### PENTIUM PCI SUPREME

**Pentium 100 MHz ..... $1899.00**
**Pentium 90 MHz ..... $1849.00**
**Pentium 75 MHz ..... $1549.00**

- Pentium PCI MB w/256K Cache
- 8 MB Ram (70ns)
- 1.44 FDD 3.5"
- PCI IDE (2S, P, G) Controller
- 540 MB IDE HDD
- Diamond Stealth 64 PCI w/1 MB
- Dos 6.22 and Windows 3.1, Add $85
- Mini Tower Case
- 15" SVGA-NI Monitor
- 101 Key Keyboard
- High Resolution Serial Mouse

### 486 VLB SUPREME MULTI-MEDIA

**Intel 486 DX2-66 ..... $1299.00**
**AMD 486 DX2-80 ..... $1299.00**
**AMD 486 DX4-100 ..... $1399.00**
**Intel 486 DX4-100 ..... $1449.00**

- Intel Pentium Technology Ready
- Mid Tower Case w/230w PS
- OPTI 486 VLB MB w/256K Cache
- 8 MB Ram (70ns)
- 1.44 FDD 3.5"
- 32 Bit VLB IDE (2S, P, G) Controller
- 32 Bit Window Accelerator w/1 MB
- Sound Blaster 16 MCD Sound Card
- Dos 6.22 and Windows 3.1, Add $85
- 540 MB IDE HDD
- SVGA-NI Monitor
- 101 Key Keyboard
- High Resolution Serial Mouse
- 2x (Double Spin) CD-Rom
- 40 Watt AMP Speakers
- 4 Deluxe CD Titles

### PENTIUM PCI SUPREME MULTI-MEDIA

**Pentium 100 MHz ..... $2249.00**
**Pentium 90 MHz ..... $2199.00**
**Pentium 75 MHz ..... $1849.00**

- Pentium PCI MB w/256K Cache
- Mid Tower Case w/230w PS
- 8 MB Ram (70ns)
- 1.44 FDD 3.5"
- PCI IDE (2S, P, G) Controller
- 850 MB IDE HDD
- Diamond Stealth 64 PCI w/2 MB
- Sound Blaster 16 MCD sound Card
- Dos 6.22 and Windows 3.1, Add $85
- 15" SVGA-NI Monitor
- 101 Key Keyboard
- High Resolution Serial Mouse
- Teac 4x (Quad Spin) CD-Rom
- 80 Watt AMP Speakers
- 4 Deluxe CD Titles

### 486 VLB SUPREME PLUS

**Intel 486 DX4-100 ..... $1799**
**AMD 486 DX4-100 ..... $1749**
**AMD 486 DX2-80 ..... $1699**
**Intel 486 DX2-66 ..... $1699**

- Intel Pentium Technology Ready
- 8 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 850 MB IDE HDD
- 32 Bit VLB IDE controller
- Diamond Stealth 64 VLB w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Key Keyboard
- High Resolution Mouse
- Premium Mid Tower Case w/ 5 Drive Bays
- Dos 6.22 and Windows 3.1, Add $85

### PENTIUM PCI SPEED STAR

**Pentium 100MHz ..... $2799**
**Pentium 90MHz ..... $2749**
**Pentium 75MHz ..... $2649**

- Pentium PCI Mother Board
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 1 GB SCSI II 10 ms HDD
- PCI SCSI II Controller
- Diamond Stealth 64 PCI w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor (1280x1024)
- 101 Key Keyboard
- High Resolution Mouse
- Premium Full Tower Case w/ 8 Drive Bays
- Dos 6.22 and Windows 3.1, Add $85

### PENTIUM PCI SPEED STAR PRO

**Pentium 100MHz ..... $3299**
**Pentium 90MHz ..... $3249**
**Pentium 75MHz ..... $2949**

- Pentium PCI Mother Board
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 1.06 GB Fast Wide SCSI-3 HDD
- Adaptec 2940W PCI Wide SCSI-3 Controller
- Diamond Stealth 64 PCI w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor (1280x1024)
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Key Keyboard
- High Resolution Mouse
- Premium Full Tower Case w/ 8 Drive Bays
- Dos 6.22 and Windows 3.1, Add $85

### 486 VLB SUPREME PLUS MULTI-MEDIA

**Intel 486 DX4-100 ..... $2099**
**AMD 486 DX2-100 ..... $2049**
**AMD 486 DX2-80 ..... $1999**
**Intel 486 DX2-66 ..... $1999**

- Intel Pentium Technology Ready
- 8 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 850 MB 11ms Enhanced IDE HDD
- 32 Bit VLB IDE controller
- Diamond Stealth 64 VLB w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Key Keyboard
- High Resolution Mouse
- Premium Mid Tower Case w/ 5 Drive Bays
- 16 Bit Sound Blaster Compatible Sound Card
- Dos 6.22 and Windows 3.1, Add $85
- 4x (Quad Spin) CD-Rom
- 14 CD Titles
- 100 Watt Hi-Fi Speakers

### PENTIUM PCI SPEED STAR MULTI-MEDIA

**Pentium 100MHz ..... $3099**
**Pentium 90MHz ..... $3049**
**Pentium 75MHz ..... $2749**

- Pentium PCI Mother Board
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 1 GB SCSI II 10 ms HDD
- PCI SCSI II Controller
- Diamond Stealth 64 PCI w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor (1280x1024)
- 101 Key Keyboard
- High Resolution Mouse
- Premium Full Tower Case w/ 8 Drive Bays
- Dos 6.22 and Windows 3.1, Add $85
- Teac 4x (Quad Spin) CD-Rom
- Sound Blaster Sound Card
- 14 CD Titles
- 100 Watt Hi-Fi Speakers

### PENTIUM SPEED STAR PRO MULTI-MEDIA

**Pentium 100MHz ..... $3799**
**Pentium 90MHz ..... $3749**
**Pentium 75MHz ..... $3449**

- Pentium PCI Mother Board
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 1.06 GB Fast Wide SCSI-3 HDD
- Adaptec 2940W PCI Wide SCSI-3 Controller
- Diamond Stealth 64 PCI w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor (1280x1024)
- 2 Serial, 1 Parallel, 1 Game Port
- Premium Full Tower Case w/ 8 Drive Bays
- Toshiba 3501 4x (Quad Spin) CD-Rom
- Sound Blaster 16 SCSI II Sound Card
- Dos 6.22 and Windows 3.1, Add $85
- 14 CD Titles
- 100 Watt Hi-Fi Speakers
- 101 Key Keyboard
- High Resolution Mouse

# You can do it all with West Tech's various computer solutions!

## PARTS

### SYSTEM BOARDS

| | |
|---|---|
| Intel Pentium PCI 90 w/256K Cache | $329.00 |
| SiS Pentium PCI 90 w/256K Cache | $190.00 |
| SiS Pentium PCI 90 w/256K Cache (includes onboard IDE &IO interface) | $239.00 |
| OPTI Pentium PCI/VLB 90 w/256K Cache | $219.00 |
| OPTI PentiumPCI/VLB 60/66 w/256K Cache | $199.00 |
| OPTI Mini 486 VLB w/256K Cache(72 Pin) | $99.00 |
| OPTI Mini 486 VLB w/256K Cache(Combo) | $97.00 |
| Amptron 6900-486 w/256K Cache(Combo) | $95.00 |
| Forex Mini 486 VLB w/256K Cache(Combo) | $89.00 |
| Vega (USA) 486 VLB w/256K Cache(72 Pin) | $149.00 |
| Vega (USA) 486 VLB w/256K Cache(30 Pin) | $139.00 |
| Amptron 486 DLC-40 w/128K Cache w/CPU and Math | $119.00 |
| Amptron 386 DX-40 w/128K Cache w/CPU | $95.00 |

Please call for pricing on AMI, Asus, and Micronics motherboards.

### MICROPROCESSORS (CPU)

| | |
|---|---|
| Intel Pentium 100 MHz | $799.00 |
| Intel Pentium 90 MHz | $629.00 |
| Intel Pentium 75 MHz | $389.00 |
| Intel 486DX4-100 MHz | $289.00 |
| AMD 486DX4-100 MHz | $289.00 |
| AMD 486DX2-80 MHz | $199.00 |
| Intel 486DX2-66 MHz | $182.00 |
| Intel 486DX-33 MHz | $139.00 |
| Intel 486SX-33 MHz | $92.00 |
| Pentium CPU fan | $13.00 |
| 486 CPU fan | $8.00 |

### MEMORY

| | |
|---|---|
| Simm 1x3 (1mb) 30 pin | $40.00 |
| Simm 1x9 (1mb) 30 pin | $42.00 |
| Simm 4x3 (4mb) 30 pin | $129.00 |
| Simm 1x32 (4mb) 72 pin | $143.00 |
| Simm 2x32 (8mb) 72 pin | $279.00 |
| Simm 4x32 (16mb) 72 pin | $459.00 |
| Simm 8x36 (32mb) 72 pin | $999.00 |
| Simm 16x36 (64mb) 72 pin | $2299.00 |

### FLOPPY DISK DRIVES

| | |
|---|---|
| Mitsumi 1.2mb (5.25") | $39.00 |
| Mitsumi 1.44mb (3.5") | $29.00 |
| Teac 1.2mb (5.25") | $44.00 |
| Teac 1.44mb (3.5") | $34.00 |
| Teac dual 1.2mb (5.25")/1.44mb (3.5") | $87.00 |

### ADD ON BOARDS AND CONTROLLERS

| | |
|---|---|
| AT Super IDE IO adapter (dual FDD & HDD, 2S, 1P, 1G) | $13.00 |
| Vesa Local Bus Super IDE & IO | $19.00 |
| PCI IDE adapter | $25.00 |
| PCI SCSI adapter | $69.00 |
| AT IDE w/16550 Hi-Speed IO | $29.00 |
| VLB IDE w/16550 Hi-Speed IO | $43.00 |
| VLB SCSI w/16550 Hi-Speed IO | $119.00 |
| Adaptec AHA-1522K SCSI floppy/hard adapter card | $137.00 |
| Adaptec AHA-1542CF SCSI bus master adapter card | $230.00 |
| Adaptec AHA-2742TK EISA SCSI bus master host adapter card | $349.00 |
| Adaptec AHA-2842K VLB SCSI bus master host adapter card | $239.00 |
| Adaptec AHA-2940 PCI wide SCSI-3 host adapter card | $349.00 |
| Adaptec AHA-2940 PCI fast SCSI-2 host adapter card | $239.00 |

Please call for pricing on GSI, Promise, Bus Logic, Boca, DTC, Ultrastor, Future Domain, Always, Tekram and Q Logic controllers.

### HARD DISK DRIVES

| | |
|---|---|
| Conner CFS 420A - 420mb IDE | $174.00 |
| Conner CFS 540A - 540mb IDE | $199.00 |
| Conner CFA 850A - 850mb IDE | $269.00 |
| Conner CFA 1275A - 1.2GB IDE | $429.00 |
| Conner CFP 1060S - 1.06GB SCSI-2 | $449.00 |
| Conner CFA 1060SW - 1.08GB Wide SCSI-3 | $529.00 |
| Maxtor MX-7540A - 540mb IDE | $199.00 |
| Maxtor MXT-71260S - 1.2GB IDE | $419.00 |
| Quantum 420mb IDE | $169.00 |
| Quantum 540mb IDE | $209.00 |
| Quantum 540mb SCSI | $239.00 |
| Quantum 730mb IDE | $265.00 |
| Quantum 1080S - 1.08GB SCSI | $529.00 |
| Quantum 2GB SCSI | $969.00 |
| Samsung 420mb IDE | $171.00 |
| Samsung 560mb IDE | $189.00 |
| Segate 3660A - 540mb IDE | $182.00 |
| Segate 31200A - 1.05GB IDE | $459.00 |
| Segate 31200N - 1.6GB SCSI | $539.00 |
| Segate 12400N - 2.4GB SCSI | $999.00 |

### HARD DISK DRIVES CONT.

| | |
|---|---|
| Western Digital AC2420 - 420mb IDE | $179.00 |
| Western Digital AC2540 - 540mb IDE | $219.00 |
| Western Digital AC2850 - 850mb IDE | $289.00 |
| Western Digital AC31000 - 1GB IDE | $399.00 |

Please call for pricing on Digital (DEC), Micropolis, Mini-Stor, and any other unlisted models

### CHASSIS (CASES)

| | |
|---|---|
| Pac AS-21 mini tower case w/230w power supply | $37.00 |
| Pac CS-11 desktop case w/200w power supply | $43.00 |
| Pac CS-21 mini tower case w/230w power supply | $43.00 |
| Pac CS-31 mid tower case w/230w power supply | $59.00 |
| Pac CS-41 full tower case w/230w power supply | $79.00 |
| Diamond KS-330 mini tower case w/220w power supply | $69.00 |
| Diamond KS-230 mid tower case w/250w power supply | $95.00 |
| Diamond KS-130 full tower case w/250w power supply | $109.00 |
| Diamond KS-730 desktop tower case w/250w power supply | $71.00 |
| API GT151 mini tower case w/230w UL power supply | $69.00 |
| API GT210 mid tower case w/250w UL power supply | $105.00 |
| API GT300 full tower case w/300w UL power supply | $159.00 |
| 2nd fan for diamond case | $10.00 |

### VIDEO BOARDS

| | |
|---|---|
| Tndent 9000 VGA w/512K | $33.00 |
| Tndent 8900 SVGA w/1mb | $52.00 |
| Tndent 9440 VLB SVGA w/1mb | $67.00 |
| Cirrus Logic 5428 VLB SVGA w/1mb | $69.00 |
| S-3 VLB SVGA w/1mb | $68.00 |
| Diamond Stealth 64 VLB w/2mb | $175.00 |
| Diamond Stealth 64 PCI w/2mb | $175.00 |
| Diamond Viper SE VLB w/2mb VRAM | $289.00 |
| Diamond Viper SE PCI w/2mb VRAM | $279.00 |
| Diamond Stealth 64 VLB w/2mb VRAM (expandable to 4mb) | $265.00 |
| Diamond Stealth 64 PCI w/2mb VRAM (expandable to 4mb) | $269.00 |
| ATI Mach 64 VLB w/2mb DRAM | $179.00 |
| ATI Mach 64 PCI w/2mb DRAM | $177.00 |
| ATI Mach 64 VLB w/2mb VRAM | $268.00 |
| ATI Mach 64 PCI w/2mb VRAM | $259.00 |
| ATI Mac 64 VLB w/4mb VRAM | $465.00 |
| ATI Mac 64 PCI w/4mb VRAM | $455.00 |

Please call for prices on Matrox, Number Nine, Orchid, Hercules, and any other unlisted models.

### MONITORS

| | |
|---|---|
| Acer 34T 14" SVGA-NI (Green)D | $215.00 |
| Acer 56Z 15" SVGA-NI (Green)D | $315.00 |
| Acer 76Z 17" SVGA-NI (Green)D | $569.00 |
| CTX 1451ES 14" SVGA-NI | $219.00 |
| CTX 1565GM 15" SVGA-NI (Green)D | $319.00 |
| CTX 1562GM 15" SVGA-NI (Green) | $295.00 |
| CTX 1765GM 17" SVGA-NI (Green)D | $575.00 |
| MAG DX-15F 15" SVGA-NI (Green)D | $307.00 |
| MAG DX-17F 17" SVGA-NI (Green)D | $575.00 |
| MAG MX | call |
| Optiquest 1000S 14" SVGA-NI (Green) | $249.00 |
| Optiquest 2000DC 15" SVGA-NI (Green)D | $355.00 |
| Optiquest 4000DC 17" SVGA-NI (Green)D | $649.00 |
| Viewsonic 15ES 15" SVGA-NI (Green) | $309.00 |
| Viewsonic 15G 15" SVGA-NI (Green)D | $365.00 |
| Viewsonic 15 15" SVGA-NI (Green)D | $385.00 |
| Viewsonic 17G 17" SVGA-NI (Green)D | $679.00 |
| Viewsonic 17 17" SVGA-NI (Green)D | $789.00 |
| Viewsonic 20 20" SVGA-NI (Green)D | $1345.00 |
| Viewsonic 21 21" SVGA-NI (Green)D | $1619.00 |
| KFC 1511 15" SVGA-NI | $279.00 |
| KFC 1507 15" SVGA-NI (Green)D | $309.00 |

Please call for prices on NEC, Sony, Nanao, Nokia M7 and any other unlisted models

### KEYBOARDS

| | |
|---|---|
| Sycan 101 keys | $15.00 |
| Honeywell 101 keys | $29.00 |
| Keytronic KT-2000 | $28.00 |
| Focus 2001 w/ hard dust cover | $32.00 |
| Focus 6000 (soft click) | $21.00 |
| Focus 7000 w/trackball | $37.00 |
| Focus 8000 (calculator, soft click) | $36.00 |
| Focus 9000 (programable calculator) | $48.00 |
| Fujitsu 4720 | $38.00 |
| Microsoft Natural Hi-Tech | $89.00 |

### CD-ROM DRIVES

| | |
|---|---|
| Creative Labs Discovery CD 16 kit | $249.00 |
| Creative Labs Digital School House 16 kit | $255.00 |
| Creative Labs Entertainment CD 16 kit | call |
| Creative Labs Multimedia Office kit | $515.00 |

### CD-ROM DRIVES CONT.

| | |
|---|---|
| Funai 2x internal | $48.00 |
| Mitsumi 4x internal IDE | $185.00 |
| NEC 510 3x internal SCSI | $195.00 |
| NEC 4x2 internal SCSI | $389.00 |
| Panasonic 562B internal 2x | $117.00 |
| Plextor 4x internal SCSI OEM | $299.00 |
| Sony 55E 2x internal IDE | $113.00 |
| Toshiba 3501 4x internal SCSI | $289.00 |
| Teac 55A 4x internal IDE | $182.00 |
| 4 CD titles | $12.00 |
| 14 CD titles | $42.00 |

Please call for pricing on Texel, Philip, Pioneer, and any other unlisted models

### SOUND CARDS AND SPEAKERS

| | |
|---|---|
| Creative Labs Pro Edition | $69.00 |
| Creative Labs Value Edition | $89.00 |
| Creative Labs 16 MCD | $129.00 |
| Creative Labs 16 MCD OEM | $79.00 |
| Creative Labs 16 MCD ASP | $165.00 |
| Creative Labs SCSI-2 | $149.00 |
| Creative Labs SCSI-2 OEM | $99.00 |
| Creative Labs SCSI-2 ASP | $185.00 |
| Creative Labs Awe 32 ASP and wave MCD | $259.00 |
| Winstorm 16 SCSI | $75.00 |
| Mini stereo speakers | $8.00 |
| MS-305 40w speakers | $25.00 |
| MS-405 100w speakers | $42.00 |
| MS-410 120w speakers | $47.00 |

Please call for prices on ATI, Cardinal, Diamond, Logitech, Roland, Orchid, Turtle Beach sound products

### MODEMS

| | |
|---|---|
| Harmony 14.4 internal data/fax | $52.00 |
| Smartone 9600/2400 internal data/fax | $31.00 |
| Smartone 14.4 internal data/fax | $79.00 |
| Smartlink 9600/2400 internal data/fax | $32.00 |
| Smartlink 14.4 internal data/fax | $69.00 |
| Smartlink 19.2 internal data/fax | $89.00 |
| Smartlink 14.4 internal data/fax/voice | $79.00 |
| Smartlink 14.4 external data/fax | $89.00 |
| Smartlink 28.8 internal data/fax | $175.00 |
| Smartlink 28.8 external data/fax | $199.00 |
| U.S. Robotics Sportster 14.4 internal data/fax | $98.00 |
| U.S. Robotics Sportster 14.4 external data/fax | $115.00 |
| U.S. Robotics Sportster 28.8 internal data/fax | $209.00 |
| U.S. Robotics Sportster 28.8 external data/fax | $235.00 |

Please call for pricing on Boca, Hayes, Supra, and Zoom modems

### TAPE BACKUPS

| | |
|---|---|
| Colorado DJ-20 internal 250mb | $145.00 |
| Colorado DJ-30 internal 350mb | $169.00 |
| Colorado DJ-25 internal 700mb | $289.00 |
| Colorado JT-20 external 250 parallel | $279.00 |
| Colorado JT-30 external 350 parallel | $319.00 |
| Colorado AB-11 external adapter kit | $38.00 |
| Colorado KE-09 external drive kit | $75.00 |
| Colorado FC-10 500kb/s - 1mb/s adapter kit | $80.00 |
| Colorado 1GB and 2GB internal and external | call |
| Conner Tapestor 250 internal | $135.00 |
| Conner Tapestor 420 internal | $175.00 |
| Conner Tapestor 250 external | $269.00 |

Please call for pricing on DEC, Etabyte, I-Omega, Summite, Tecmar and Wangtek tape backup systems

### MICE/TRACKBALLS

| | |
|---|---|
| Qtronix 3 button serial mouse | $8.00 |
| A-4 Tech serial mouse | $9.00 |
| A-4 Tech serial trackball | $24.00 |
| A-4 joystick | $17.00 |
| Logitech Bus Mouseman | $62.00 |
| Logitech PS-2/serial Mouseman | $39.00 |
| Logitech PS-2/serial Trackman | $69.00 |
| Logitech Cyberman 3D | $42.00 |
| Logitech cordless mouse | $85.00 |
| Microsoft serial mouse | $27.00 |
| Microsoft bus mouse | $52.00 |
| Microsoft ballpoint trackball | $49.00 |

### PRINTERS

Please call for pricing on Cannon, Citizen, Epson, Hewlett Packard and Panasonic printers

---

**ALL PRICES REFLECT A 3% CASH DISCOUNT**

**DISCOUNTS AVAILABLE FOR DEALERS AND CONSULTANTS**
We at West Tech have special discount rates set up for small dealers and volume buyers.

**CORPORATE, EDUCATION AND GOVERNMENT PO'S WELCOME**
Fax us your PO and we'll ship your order on approval by our financial department. It's that easy!

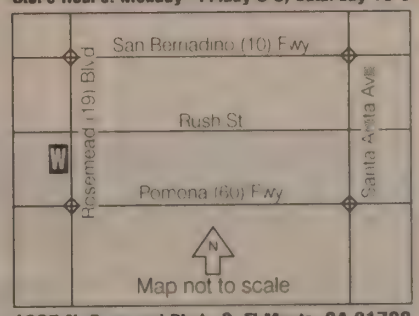
**UNLIMITED TECHNICAL SUPPORT**
Sometimes even the experts have questions and at WEST TECH we've got the answers. Minimize downtime and call us whenever you need fast, reliable solutions.

**WE GLADLY ACCEPT**

VISA · MasterCard · DISCOVER · PERSONAL CHECKS

**Terms:**
- 30 day money back gaurantee with 15% restocking fee
- All prices are C.O.D. cash
- All returns must be as-new and sent prepaid with RMA number
- One year warranty on parts
- Three years labor waranty
- West Tech is not responsible for typographical errors.

**Store Hours: Monday - Friday 9-6, Saturday 10-5**




**1935 N. Rosmead Blvd., S. El Monte, CA 91733**

**Phone (818) 279-1358 • Fax (818) 279-2853 • Tech Support (818) 279-2819 • Customer Service (818) 279-2939**

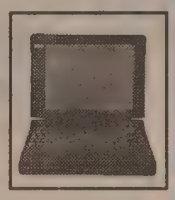
# ADVANCED COMPUTER CENTERS

## PLEASE CALL FOR CURRENT PRICING!

### Pentium Notebook
**w/16 Bit Sound Card Built-In**

STAGER

- Intel Pentium CPU 60/66MHz
- 16KB Internal Cache
- 8MB RAM Exp. to 40MB
- 1X 16550 Serial & 1X ECP/EPP Printer Port
- Removable HDD (250,340,520,810)
- 32 Bit Local Bus VGA (1MB w/Windows Accelerator) & IDE HDD
- 2X PCMCIA Slot
- 9.5" Active TFT Color
- 10.3" Dual Scan Color
- 25mm Trackball
- NiMH Rechargeable Battery



**NP3600**

**Pentium-60, 8MB/250MB HDD**

| | |
|---|---|
| Dual-Scan Color LCD | $2415 |
| Active TFT Color LCD | $3120 |

### Pentium Notebook
**w/16 Bit Sound Card Built-In**

STAGER

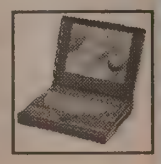
- Intel Pentium CPU 90 MHz
- 16KB Internal & 256KB Secondary Cache
- 8MB RAM Exp. to 40MB
- 1X 16550 Serial & 1X ECP/EPP Printer Port
- Removable HDD (250,340,520,810)
- 32 Bit Local Bus VGA (1MB w/Windows Accelerator) & IDE HDD
- 2X PCMCIA Slot
- 9.5" or 10.4" Active TFT Color
- 10.3" Dual Scan Color
- 19mm Trackball
- NiMH Rechargeable Battery

**NP7500/NP7600**

| 250MB/4MB | Mono | Dual Scan Color | Active Color |
|---|---|---|---|
| 486DX2-66 | $1445 | $1920 | $2630 |
| **250MB/8MB** | **Mono** | **Dual Scan Color** | **Active Color** |
| Pentium/90MHz | N/A | $2790 | $3535 |

### NP9200
**w/ Sound Card Built-In**

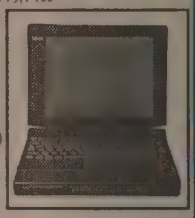
- Intel SL Enhanced 486DX-33, 2-66, 4-75, 4-100
- 8KB Internal & 256KB Secondary Cache
- 4MB RAM Exp. to 36MB
- 1X Serial & 1X Printer Port
- Removable HDD (250,340,520,810)
- 32 Bit Local Bus VGA 1MB w/ Windows Accelerator
- 2X PCMCIA Slot
- 9.5" Active TFT Color
- 10.3" Dual Scan Color
- 25mm Trackball
- NiMH Rechargeable Battery



| 250MB/4MB | Mono | Dual Scan Color | Active Color |
|---|---|---|---|
| 486SX-33 | $1410 | $1870 | $2575 |
| 486DX-33 | 1440 | 1900 | 2605 |
| 486DX2-66 | 1475 | 1935 | 2640 |
| 486DX4-100 | 1675 | 2135 | 2840 |

### NP9400
**w/16 Bit Sound Card Built-In and 2X CD ROM Built-In**

- Intel SL Enhanced 486DX-33,2-66,4-75,4-100
- 8KB Internal & 256KB (up to 1MB) Secondary Cache
- 4MB RAM Exp. to 64MB
- 2X 16550 Serial & 1X ECP/EPP Printer Port
- Game Port
- Removable HDD (250,340,520,810)
- 32 Bit Local Bus VGA (1MB w/ Windows Accelerator) & IDE HDD
- 2X PCMCIA Slot (Option 2nd PCMCIA Slot X2)
- 9.5" & 10.4" Active TFT Color
- 10.3" Dual Scan Color
- Trackpoint Built-in
- NiMH Rechargeable Battery



| 250MB/4MB | 10.3" DUAL | 9.5" ACTIVE | 10.4" ACTIVE |
|---|---|---|---|
| 486SX-33 | $2160 | $2865 | $3115 |
| 486DX2-66 | 2225 | 2930 | 3180 |
| 486DX4-75 | 2400 | 3105 | 3355 |
| 486DX4-100 | 2425 | 3130 | 3380 |

### 17" SPECIAL $625

*Features:*
- 17" Non-glare, Flat Square Screen
- On-screen controls for adjusting brightness, contrast, image position and size
- Low Radiation, .27 NI, 1280 x 1024 resolution
- EPA VESA Compliant

15" AcerView 56L . . . . $330
14" AcerView 34T .28 . . $220
14" AcerView 11DG .39 . $190

**AOpen**
*Acer Open Division*
*Your Key Component Partner*

### CONFIGURATIONS

| | M/B | M/B+CPU | BASIC SYSTEM (210MB,4MB, SVGA 14") |
|---|---|---|---|
| P5-90/256 PCI + ISA (INTEL MB) | $290 | $921 | $1604 |
| P5-90/256 PCI + ISA (OPTI CHIPSET) | $225 | $821 | $1553 |
| P5-66/256 PCI + ISA (INTEL CHIPSET) | $275 | $887 | $1453 |
| P5-66/256 PCI + ISA (SIS CHIPSET) | $205 | $617 | $1334 |
| P5-60/256 PCI + ISA (INTEL CHIPSET) | $275 | $670 | $1410 |
| P5-60/256 PCI + ISA (SIS CHIPSET) | $205 | $600 | $1316 |
| INTEL 486-DX2/66 VLB/256K | $95 | $265 | $945 |
| INTEL 486-DX/50 VLB/256K | $95 | $358 | $1039 |
| INTEL 486-DX2/50 VLB/256K | $95 | $261 | $938 |
| INTEL 486-DX/33 VLB/256K | $95 | $224 | $899 |
| INTEL 486-DX4/100 VLB/256K | $118 | $495 | $1173 |
| AMD 486-DX2/66 VLB/256K | $95 | $253 | $934 |
| AMD 486-DX40 VLB/256K | $95 | $234 | $909 |

Basic Systems Include: M/B, CPU, 4MB, 1.44MB FDD, IDE I/O, 210MB HDD, Mini Tower, 1MB SVGA, KB, Mouse, 14" Monitor

### UPGRADES FOR BASIC SYSTEMS

| | | |
|---|---|---|
| 420MB HDD | ADD | $40 |
| 540MB HDD | ADD | $70 |
| 1.08GB HDD | ADD | $285 |
| ACER 15" SVGA | ADD | $110 |
| ACER 17" SVGA | ADD | $405 |
| 1.2MB FDD | ADD | $45 |
| 1.44MB FDD | ADD | $35 |
| 8MB RAM | ADD | $140 |
| 512K CACHE | ADD | $45 |
| 2MB VGA CARD | ADD | $50 |
| 16MB RAM (486) | ADD | $295 |
| 16MB RAM (P5) | ADD | $420 |
| FOCUS 2001 KB | ADD | $18 |
| FOCUS 8000 KB | ADD | $24 |
| FOCUS 9000 KB | ADD | $34 |
| KEYTRONICS KB | ADD | $15 |
| MICROSOFT MOUSE | ADD | $20 |
| MINI TOWER (FCC) | ADD | $15 |
| MED TOWER | ADD | $15 |
| FULL TOWER | ADD | $25 |
| DESKTOP | ADD | $0 |
| W/O 1.44 FDD | DEDUCT | $28 |
| W/O HDD | DEDUCT | 130 |
| W/O MONITOR | DEDUCT | 185 |
| W/O RAM | DEDUCT | 130 |
| W/O KEYBOARD | DEDUCT | 10 |
| W/O MOUSE & PAD | DEDUCT | 8 |
| W/O VGA CARD (486) | DEDUCT | 60 |
| W/O VGA CARD (P5) | DEDUCT | 76 |

### MULTIMEDIA UPGRADE KITS

| | |
|---|---|
| **Double Speed CD ROM Kit** | $239 |
| Panasonic Double Speed CD ROM Sound Blaster 16 Sound Card | |
| **Triple Speed CD ROM Kit** | $379 |
| Toshiba SCSI Triple Speed CD ROM Sound Blaster 16 SCSI Sound Card | |
| **Quad 4X Speed CD ROM Kit** | $349 |
| Mitsumi Quad Speed CD ROM Sound Blaster 16 Sound Card | |
| **Quad 4X Speed CD ROM Kit** | $449 |
| Toshiba SCSI Quad Speed CD ROM Sound Blaster 16 SCSI Sound Card | |

### HARD DISK DRIVES

| | |
|---|---|
| 210MB 14MS (IDE) CONNER | $145 |
| 420MB 14MS (IDE) CONNER | 185 |
| 540MB 12MS (IDE) CONNER | 215 |
| 850MB 12MS (IDE) CONNER | 299 |
| 1.0GB 12MS (IDE) WESTERN DIGITAL | 430 |
| 540MB 12MS (SCSI) CONNER | 255 |
| 1.0GB 10.5MS (SCSI) CONNER | 515 |
| 2.1GB 9.5MS (SCSI-2) QUANTUM | 955 |

### HDD/FDD ADAPTERS

| | |
|---|---|
| IDE I/O (ISA) | $13 |
| IDE I/O (VLB) | 18 |
| IDE I/O (PCI) | 35 |
| ISA Enhanced I/O (2S, 1P) 16550 UART | 24 |
| ISA IDE I/O (2S, 1P) 16550 UART | 29 |
| Adapter 1542CF | 169 |
| Adapter 2842VI w/Kit | 255 |
| Adapter 2940PCI | 225 |
| ASUS SCSI (PCI) | 82 |
| Promise DC-4030 (VLB, 0K) | 103 |

### CASES

| | |
|---|---|
| Mini Tower 200W Dig | $45 |
| Mini Tower (FCC) 200W | 60 |
| Desktop 200W Dig | 45 |
| Med Tower 250W Dig | 60 |
| Full Tower 250W Dig | 70 |

### VIDEO CARDS

| | |
|---|---|
| VGA 256K (ISA) | $28 |
| VGA 512K (ISA) | 39 |
| VGA 1MB (ISA) | 58 |
| Trident 1MB ((VLB) | 65 |
| Cirrus Logic 1MB (VLB) | 69 |
| S3-805 1MB (VLB) | 72 |
| S3-804 1MB (PCI) | 92 |
| ATI Wonder 1MB DRAM (VLB/PCI) | 110 |
| ATI Mach 32 2MB VRAM (VLB/PCI) | 239 |
| ATI WinTurbo Mach 64 2MB VRAM (VLB/PCI) | 285 |
| Diamond Stealth 24 1MB (VLB) | 139 |
| Diamond Stealth 24 2MB VRAM (VLB/PCI) | 285 |
| Diamond Viper 2MB VRAM (VLB/PCI) | 259 |
| Mono/LPT Port | 15 |
| Western Digital Bahama 64 1MB PCI | 125 |
| Western Digital Bali 1MB PCI | 92 |

### MONITORS

| | |
|---|---|
| Acer 11DG 14" .39 NI 1024 | $190 |
| Acer 34D 14" .28 NI 1024 | 209 |
| Acer 34T 14" .28 NI 1024 | 220 |
| Acer 56L 15" .28 NI 1024 Dig | 330 |
| Acer 76i 17" .27 NI 1280 Dig on Screen | 625 |
| ADI 3GP 14" .28 NI 1024 | 295 |
| ADI 4GP 15" .28 NI 1280 | 375 |
| ADI 5EP 17" .28 NI 1280 | 675 |
| MAG DX 15F 15" .28 NI 1280 | 349 |
| NEC 5XF 17" .28 NI 1280 | 1046 |
| NCX 5XP 17" .28 NI 1660Hz 1280 Mac & PC | 1229 |
| Sony 15SF 15" NI 1280 | 459 |
| Viewsonic 15E .28 NI 1024 | 369 |
| Viewsonic 15EX .26 NI 1024 Dig | 389 |
| Viewsonic 15G .26 NI 1024 On-screen | 379 |
| Viewsonic 15 .27 NI 1280 | 429 |
| Viewsonic 17E .28 NI 1280 Dig | 735 |
| Viewsonic 17G .28 NI 1280 On-screen | 795 |
| Viewsonic 17 .27 NI 1600 Dig | 929 |
| 14" Monochrome | 79 |
| 14" Monochrome VGA | 89 |

### CD ROM/MULTIMEDIA

| | |
|---|---|
| Sound Blaster 16 | $73 |
| Sound Blaster 16 MCD | 79 |
| Sound Blaster 16 SCSI | 105 |
| Panasonic 2X CD ROM | 118 |
| NEC 3Xi SCSI CDROM | 235 |
| NEC 3Xe SCSI CD ROM Ext | 425 |
| Mitsumi FX400 Quad CD ROM | 210 |
| Toshiba Triple SCSI CD ROM | 219 |
| Toshiba 4X SCSI CD ROM | 275 |
| 3-IN-1 AT CD ROM Contl Card | 15 |
| CP OK Portable Speaker | 8 |
| SP-691 25W Speaker w/AC Adapter | 24 |
| MLI-115 115W Speaker w/AC Adapter | 40 |
| CD Caddy | 7 |
| CD Titles | Start From $10 |

### KEYBOARDS

| | |
|---|---|
| Acer 101 Key (Small) | $15 |
| Acer 101 Key (Regular) | 30 |
| Keytronic 101 Key | 30 |
| Focus 2001 w/Dust Cover | 34 |
| Focus 8000 w/Calculator | 39 |
| Focus 9000 Programmable w/Calculator | 49 |
| 101 Keyboard PS/2 | 15 |
| Q-Tronics 101 Keyboard | 18 |

### MISCELLANEOUS

| | |
|---|---|
| Smartlink Fax/Modem 96/24 | $30 |
| Smartlink Fax/Modem 14.4/14.4 Int. | 68 |
| Smartlink Fax/Modem 14.4/14.4 Ext. | 99 |
| Smartlink Fax/Modem/Voice 14.4/14.4 | 79 |
| Smartlink Fax/Modem 28.8/28.8 Int. | 179 |
| US Robotic Fax/Modem 14.4/14.4 Int. | 105 |
| US Robotic Fax/Modem 14.4/14.4 Ext. | 130 |
| US Robotic Fax/Modem 28.8/28.8 Int. | 199 |
| US Robotic Fax/Modem 28.8/28.8 Ext. | 225 |
| Microsoft Serial 2 Mouse | 29 |
| Microsoft Ball Point Mouse | 20 |
| Logitech First Mouse | 35 |
| Logitech Mouseman | 45 |
| Z-Nix Mouse | 9 |
| Mouse Pad | 2 |
| Conner Int. 250MB Tape Back-up | 135 |
| Conner Ext. 250MB Tape Back-up | 279 |
| Colorado Int. 250MB Tape Back-up | 145 |
| Colorado Ext. 250MB Tape Back-up | 319 |

**Financing Available on Approved Credit. Government, School and Corporate P.O.'s Welcome.**

**3% Cash Discount**

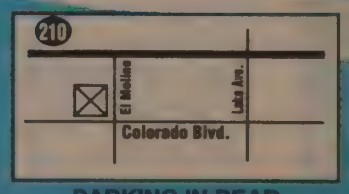
DISCOVER VISA MasterCard

**CORPORATE OFFICE & SERVICE CENTER**
Appointments Please

6800 Orangethorpe Ave., #A
Buena Park, CA 90620
TEL (714) 521-9783
FAX (714) 522-0990

Mon.-Fri. 10:00-6:30
Sat. 11:30-6:00
Closed Sunday

645 E. Colorado Blvd.
Pasadena, CA 91101
TEL (818) 795-3939
FAX (818) 795-0549




PARKING IN REAR

*Prices subject to change without notice.*

population issues in a city, and we have financial issues, and NIMBY issues. We have all these things, but they're all in SimCity and you have to pay attention to all of them; there's multiple variables. There's cause and effect. Everything's tradeoffs.

What we're trying to do with our products is—there's no right or wrong, there's no good or bad. Someone told me once that we could solve all the world's human-caused pollution problems in ten minutes if everyone holds their breath for ten minutes. The world's problems with mankind are done. [*laughs*]

There's no right or wrong, no good or bad. You just open up your mind and think. Our products are that way. With SimEarth, you can send a comet down and trash an entire civilization! Who says we're not violent—my God, you can burn the entire planet up! What could be more violent than burning up an entire planet?

But yet they think that SimEarth is educational and nonviolent. In SimCity you can torch the entire town. You can set the whole thing in flames and crumble it to the ground and kill everybody there, all those virtual Sims. And yet we're not as violent as Mortal Kombat!

No, we're *very* violent! We're incredibly violent. They're at least doing it on a one-on-one basis. We take out the entire town.

So I can make a case that not only is Mortal Kombat educational, but that SimCity is more violent than Mortal Kombat. It's not about what's right or wrong or good or bad, it's about what do you want. What do you want to create? What do you want in your world? You can decide your environment, and that's what's important.

Not that I'm going to build a "good city." There's no such thing as a good city. A good city is one that meets whatever needs you decide your city should be meeting. That's what's good.

Some people are very cruel to their citizens and torture them all the time [*laughs*] and have police states with police stations everywhere. "There's no crime here!" Other people say, "I don't like those pigs and I don't want police in my neighborhood," and they have lots of crime but they say that's a small price to pay for not having a police state. You've got your libertarians and your anarchists and they're all right. Nobody's wrong and nobody's right—it's just what do you want to achieve.

That's what simulations teach, goal-oriented learning. In SimEarth, you can change Earth's axis—what happens if I make it perfect like a top instead of wobbling off-center a little bit? The wobbling causes seasons. That's learning, but we didn't say what's good or bad. You want to turn up the heat of the sun, you fry the planet. Do it! We didn't leave that feature out because we said, "Oh, it's bad to burn the planet." In SimEarth, in ten billion years eventually the sun goes supernova, so the whole goal is to get civilization to a level where it can leave the planet and go on to other planets. It's like life, it just continues on.

Play is learning in a safe environment. What simulations do is give you a safe environment for learning. You can make mistakes without feeling like an idiot, because no one saw you make the mistake.

**Like when spreadsheets came out, it was much easier to do what-ifs.**

Spreadsheets *are* simulations. That's the whole point.

**This is just more multidimensional.**

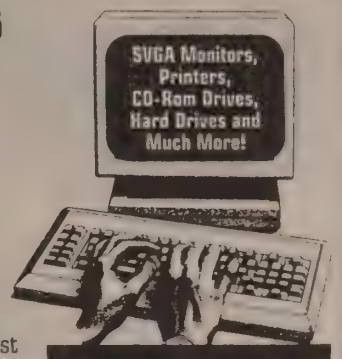
Exactly. We're just taking the numbers and turning them into pictures. We are doing what-if, cause and effect. SimCity is a spreadsheet for cities. That's what cellular automata is; we're manipulating matrix data. It's a 3-D spreadsheet. There's numbers going both ways, and those numbers translate to graphics—if you have lots of money your buildings look good, and if you don't have much money the buildings start looking ugly. That's all being driven from the numbers.

**So do you see this being a modeling tool extending into real life?**

Buena Park Mall
Derek M. Borthwick Presents
A MALL COMPUTER SHOW & SALE
AT THE BUENA PARK MALL, BUENA PARK, CA

SATURDAY, MARCH 11, 1995
10:00 a.m. to 6:00 p.m.
SUNDAY, MARCH 12, 1995
11:00 a.m. to 6:00 p.m.

- FREE UNLIMITED PARKING
- FREE ADMISSION FOR THE ENTIRE FAMILY
- FREE COMPUTER SEMINARS
- AFFORDABLE FOOD COURT




Over 100 Tables Loaded with Thousands of Products from Orange & L.A. County's Largest Computer Exhibitors at **Unbelievable Prices!**

**DIRECTIONS:**
Take the Artesia Fwy./Riverside Fwy. (91) to Beach Blvd., exit south to La Palma Avenue, turn left. Buena Park Mall is located one block east of Knott's Berry Farm on La Palma

**EXHIBITOR INFORMATION**
TABLE FEES: $190.00 for one 8 ft. table for two days.
$190.00 for each additional table for two days.
$100.00 for one 8 ft. table for one day.
$100.00 for each additional table for one day.

**FOR MORE INFORMATION CONTACT:**
DEREK M. BORTHWICK SHOW PRODUCTIONS
P.O. Box 1018, West Covina, California 91793-1018
FAX: (818) 913-1703
**(818) 913-4046** (24 Hour Show Information)

**MILLIONS OF DOLLARS IN MERCHANDISE. . .**
Telecommuting - The Internet - LANs
Multimedia - Laptops - Industry Insight
Upgrading - Monitors - Hard Drives
New Products - Notebooks - Fonts
Printers - Drivers - Scanners
Modems - Graphic Cards - Mouses
Motherboards - Networking - Controllers
Video Adapters - Systems Boards
Software - Keyboards - CD Rom
Floppy Drives - Trackballs - Fax Machines
Baud Internal Modems - Diskettes
Sound Cards - Ethernet Adapters
Syquest Drives - Components - CPU's
Tape Backups - Color Printers
Tower Cases - Multimedia Kits
Accessories - And Much More!

*"COMMITTED TO QUALITY MALL SHOWS FOR OVER A DECADE."*

SANTA FE SPRINGS MALL
Derek M. Borthwick Presents . . .
A MALL COMPUTER SHOW & SALE
at the Santa Fe Springs Mall, Santa Fe Springs, CA

SATURDAY, APRIL 1, 1995
10:00 a.m. to 7:00 p.m.
SUNDAY, APRIL 2, 1995
11:00 a.m. to 6:00 p.m.

- FREE UNLIMITED PARKING
- FREE ADMISSION FOR THE ENTIRE FAMILY
- FREE COMPUTER SEMINARS
- AFFORDABLE FOOD COURT

Over 100 Tables Loaded with Thousands of Products from Orange & L.A. County's Largest Computer Exhibitors at **Unbelievable Prices!**

**DIRECTIONS:**
Take the 605 Rivergrade Freeway to Telegraph Road, exit east to the corner of Carmenita and Telegraph Road.

**EXHIBITOR INFORMATION**
TABLE FEES: $190.00 for one 8 ft. table for two days.
$190.00 for each additional table for two days.
$100.00 for one 8 ft. table for one day.
$100.00 for each additional table for one day.

**FOR MORE INFORMATION CONTACT:**
DEREK M. BORTHWICK SHOW PRODUCTIONS
P.O. Box 1018, West Covina, California 91793-1018
FAX: (818) 913-1703
**(818) 913-4046** (24 Hour Show Information)

**MILLIONS OF DOLLARS IN MERCHANDISE. . .**
Telecommuting - The Internet - LANs
Multimedia - Laptops - Industry Insight
Upgrading - Monitors - Hard Drives
New Products - Notebooks - Fonts
Printers - Drivers - Scanners
Modems - Graphic Cards - Mouses
Motherboards - Networking - Controllers
Video Adapters - Systems Boards
Software - Keyboards - CD Rom
Floppy Drives - Trackballs - Fax Machines
Baud Internal Modems - Diskettes
Sound Cards - Ethernet Adapters
Syquest Drives - Components - CPU's
Tape Backups - Color Printers
Tower Cases - Multimedia Kits
Accessories - And Much More!

*"COMMITTED TO QUALITY MALL SHOWS FOR OVER A DECADE."*

MACRO COMPUTER

16025 E. Gale Ave., #A-14, City of Industry, CA 91745
Tel (800) 860-8278
Fax (818) 330-4846

**486DX2-66 MULTIMEDIA**

- Mid Tower Case w/250 Watt PS
- 8MB RAM 70ns
- 730MB Hard Disk Drive
- 1.44MB TEAC Floppy Disk Drive
- 4X Speed CD ROM Drive
- 16 Bit Sound Blaster Card
- 15" SVGA NI .28dp Monitor
- 32 Bit VLB Video Card w/1MB
- 32 Bit VLB HDD & FDD Controller w/2S, 1P, 1G
- 101 Enhanced Keyboard
- High Resolution Mouse
- 14 Popular CD Titles
- 80 Watt Stereo Speakers

$1499

Same System w/o Multimedia

$1199

**PENTIUM 90 W/ 4X CD ROM**

- Full Tower Case w/250 Watt PS
- 16MB RAM 70ns
- 1.0GB Hard Disk Drive
- 1.44MB TEAC Floppy Disk Drive
- 4X Speed CD ROM Drive
- 16 Bit Sound Blaster Card
- 17" MAG .26dp 1280 x 1024 NI Monitor
- Diamond Stealth 64 Bit PCI Windows Accelerator w/2MB
- PCI IDE Controller w/2S, 1P, 1G
- Focus 2001 Enhanced Keyboard
- Microsoft Mouse
- 14 Popular CD Titles
- 80 Watt Stereo Speakers

$2899

Same System w/o Multimedia

$2599

**PCI POWER STATION**

- Full Tower Case w/250 Watt PS
- 16 MB RAM 70ns
- 1.05GB 9ms Fast & Wide SCSI HD
- 1.44MB Floppy Disk Drive
- PCI Adaptec 2940W Wide SCSI Controller Card
- Diamond Stealth 64 Bit PCI Windows Accelerator w/2MB
- 17" MAG .26dp 1280 x 1024 NI Monitor
- Toshiba 4X Speed SCSI CD ROM
- Sound Blaster AWE 32 Card
- 14 Popular CD Titles
- 80 Watt Stereo Speakers
- Focus 2001 Keyboard
- Microsoft Mouse

$3499

Same System w/o Multimedia

$2899

**MULTIMEDIA UPGRADES**

- TEAC 4X Speed CD ROM
- 16 Bit Sound Blaster Card
- 14 Popular CD Titles
- 80 Watt Stereo Speakers

$329

- Panasonic or Sony 2X CD ROM
- 16 Bit Sound Blaster Card
- 14 Popular CD Titles
- 80 Watt Stereo Speakers

$239

**PRINTERS**

HP 540 . . . . . .$269
HP 560C . . . . . .$449
HP 4 PLUS . . . . . .$1345
HP 4SI . . . . . .$2770
CANON ALL MODELS . . .CALL
EPSON ALL MODELS . . .CALL

**16025 E. Gale Ave., #A-14**
**City of Industry, CA 91745**
**Tel (800) 860-8278**

STORE HOURS:
MON-FRI 9:00-7:00, SAT 10:00-6:00

VISA MasterCard




Let me put it this way.

Right now in our society, even though we have a democracy, we really don't. We're governed by the officials and their best guess as to what's right and wrong. We as a citizenry trust that the government will do the right thing with the budget. Now the truth is the budget is so complex that nobody understands it. Nobody. It's two or three years before the Office of Budget Management can say what happened.

And yet we're expected to make decisions now.

What happens is that it becomes a dictatorship because the citizenry can't be informed. There's no way the citizenry can be informed on the complex budget. This is like back to monarchy, dependent on the experts.

Well, what's an expert? An expert is someone who's learned by doing. I haven't had the opportunity to learn by doing. Well, simulations allow you to learn by doing. So rather than sitting here with *TIME* magazine talking about the budget or the health care system, which is another wild thing that no one understands, or taxes—nobody knows all the tax laws, but you're expected to follow them—it's very hard to show that in linear talking. But if you want to build a simulation of the budget, or a simulation of the tax collection system, or a simulation of health care, all of a sudden the issues start popping up.

And if the citizenry starts doing this, they can learn by doing. You know what a letter to the editor is? It's a model. It's a simulation. It's a spreadsheet. It says, "My idea is different from this consensus idea because..." Cause and effect, but you're doing it with text.

But what if people could send simulations to the editor? People could start debating simulations instead of concepts, and when you get a simulation that everyone agrees to, we marry it up to reality, and we make the real world work like the simulated world. You have a simulation of it, and the real thing, and they keep checking each other. The simulation keeps getting modified because the real world changes. The real world changes because the simulation is turning up some alternatives that the real world hasn't thought of—that you might want to avoid this and avoid that.

The power of simulation going forward is a way to inform the citizenry of issues that nobody can understand, and bring them back to a level of complexity that everyone can understand. So the government officials can't pull the wool over our eyes because of the complexity involved in it and say, "Trust me, you can't understand it."

Simulations can bust the door of complexity and get common people to understand the budget, get common people to understand the health care system, the justice system, the prison system, the roadways, our transportation, our power.

That's the social implication of simulations—allowing groups to collaboratively decide what would be in their interest. Consensus will emerge. There are things that people all agree on. I don't know anyone going around saying they think certain people should have health care and others shouldn't—that's not the point. The point is how you do it. You can do it a lot of ways, and they all have ups and downs and goods and bads. We're not trying to say that the government's bad because of the way they spend money; it just is, and that's a model in itself. You run it this way, and this is what happens. You run it that way, and this is what happens. Cause and effect. Simulations can teach that. Books can't.

**Do you see the online world as an opportunity?**

We want to take advantage of all media. Maxis is not really a PC bigot—online is an interesting environment too, and it's going to be more and more important. We see some real advantages online—obviously the big one, as you've discovered if you've been on America Online or The WELL, is community. Online is about community.

Up until now we've never really thought about community in our products; they're standalone. There's a community around SimCity that happens online, with people sharing their cities and talking about their experience of the product, but not so much collaboratively building a city. So we're looking at what a

*continued on page 158*

Preview

IDBMA, Inc.'s
INTERNATIONAL
Spectrum®

# The Business Computer Show®

## Where You'll Find Everything You Need Under One Roof To Make Your Computer Work For You...At Work And At Home!

**March 28–30, 1995**
**Anaheim Convention Center**

**Show Hours:**
Tuesday, Wednesday: 10:00 a.m.–5:00 p.m., Thursday: 10:00 a.m.–3:00 p.m.
Call 1-800-767-SHOW for more information or email: *75774,2520@CompuServe.Com*

**Sponsored By**
IDBMA, Inc.
10675 Treena St.
Suite 103
San Diego, CA
92131
Tel: (619)578-3152
Fax: (619)271-1032

If you missed the last fourteen years of International Spectrum's Business Computer Show, you won't want to miss the 1995 expo: the biggest and longest-running all-business computer show in Southern California. Best of all, this year's show opens up to the home office worker, offering more products and services to help you run better, faster, and more productively from home or on the road.

There's Something For Everyone at This Year's Business Computer Show:

### The Home Office Pavilion Cosponsored By MICROTIMES

**Buy Everything You Need At Discount Prices!**

For telecommuters, small-business owners, mobile office workers, and anyone who works hard to maintain a productive working environment in their own home or on the road: You'll find everything in the Home Office Pavilion to make your job easier and more efficient, and save money too.

Everything is priced as an "Expo Special" and the best part is, you can buy just what you need, right there. Here's what you'll see:

* PCs, printers, and software
* CD and multimedia technology
* Modems, diskettes, and other computer supplies
* Fax machines, copiers, and other office supplies

... plus more

### Entertainment Software Pavilion

**Take A Break To Come And Play!**

Come and try out today's hottest games and entertainment software for your PC! New to Spectrum this year is the Entertainment Software Pavilion—a place to sneak away, play awhile, stay awhile, and relax awhile. You'll find lots of PCs loaded with CD-ROM, multimedia, speakers, full-motion video, and more, all with software that will test your talent, tease your brain, or simply make you forget about business for awhile.

If you've never had the time or place to

*continued on page 164*

# GENISYS MICRO CONCEPTS INT'L

## ASEAN COMPUTER TECHNOLOGIES, INC.

• 20425 E. VALLEY BLVD. • WALNUT, CA 91789 • TEL: (909) 598-2828 FAX: (909) 598-5748 •

### GENISYS 486 "*COLT*" VESA LOCAL BUS SYSTEM

- 486DX2-66 Vesa Local Bus System
- ***4MB*** RAM
- Med Tower Case w/P/S (H)
- 101-Key Enhanced Keyboard
- 1024x768 14" ***.28dp Non-Interlace*** SuperVGA Monitor
- ***32-Bit VLB*** Accl. SVGA Card w/1MB
- ***32-Bit VLB*** IDE Controller
- 2-Serial, 1-Parallel, & 1-Game Ports
- ***420MB*** IDE Hard Drive
- *3.5"* 1.44MB Floppy Drive
- 3-Button Serial Mouse (MS Compatible)

**$899.00**

(3.3V 80MHz CPU, Lower Power, 22% Faster 66MHz)

**AMD 486DX2-80MHz ..... Add $35**
**or AMD 486DX4-100MHz ..... Add $100**

### Genisys 486DX2-66 VLB Multi-Media System

- 486DX2-66 Vesa Local Bus System
- ***4MB*** RAM
- Med Tower Case w/P/S (H)
- 101-Key Enhanced Keyboard
- 14" ***.28dp Non-Interlace*** SVGA
- ***32-Bit VLB*** Accl. SVGA Card w/1MB
- ***32-Bit VLB*** IDE Ctrl. w/I/O (2S/1P/1G)
- 2-Serial, 1-Parallel, & 1-Game Ports
- ***420MB*** IDE Hard Drive
- 3.5" 1.44MB Floppy Drive
- Hi Resolution Serial Mouse
- ***2X*** CD ROM Drive, 16-bit Sound Card
- U/W Atlas,Chess3000,Typing
- 4W Stereo Speakers

**$1059.00**

**Upgrade 2X CD ROM to Teac Quad Speed (600MB/sec) ..... Add $80**

### Genisys Pentium-66 PCI "*STALLION*" System

- ***Intel Pentium*** 66 MHz CPU
- CPU Heat Sink & Cooling Fan
- ***8MB*** RAM Installed w/256K Cache
- Med Tower Case w/P/S (H)
- 101-Key Enchanced Keyboard
- 1024x768 14" ***.28dp Non-Interlace*** SuperVGA Monitor
- PCI Accl. SVGA w/1MB
- PCI IDE HD/FD Ctrl. w/I/O (2S1P1G)
- ***420MB*** IDE Hard Drive
- 3.5" 1.44MB Floppy Drive
- Hi Resolution Serial Mouse

**$1299.00**

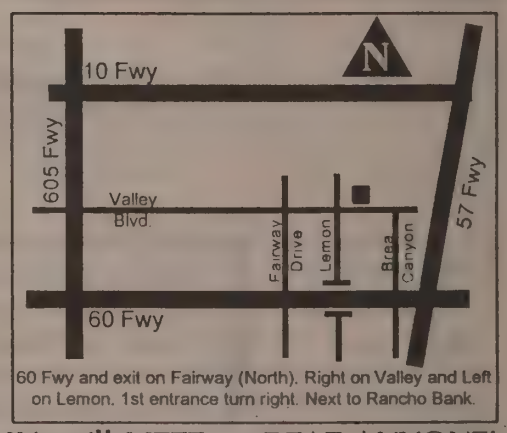
CD ROM Package (Special w/System Purchase)
US/W Atlas, Typing, Chess Master3000, Mini Speakers, 16-Bit Sound Card
w/2X Dual Speed CD ROM Drive ..... $180
w/4X Teac Quad Speed CD ROM Drive ..... $280

*Wholesale $$ To The Public*
*Genisys high Performance Systems are pre-tested a minimum of 72-hrs to ensure maximum quality and reliability*

**ORDER HOTLINE**
**SALES: (909) 598-2828**
**FAX: (909) 598-5748**

Gorvernment & University
Purchase Orders & Corp. Acct.
**WELCOME**
*** Delivery & Setup, On-Site Service Available**
(Please call for different plans)

**Office Hours: Mon-Fri 9AM-6PM**
*Price Subject to Changes Without Notice*




60 Fwy and exit on Fairway (North). Right on Valley and Left on Lemon. 1st entrance turn right. Next to Rancho Bank.

We will MEET or BEAT ANYONE's Advertised Price!!
Note: Configuration must be identical.

### Multimedia Packages

***Sound Blaster Discovery CD-16 Package***
***$245***
***Sound Blaster Digital Schoolhouse Package***
***$265***

***"Pony" 16-Bit Multimedia Kit***
Sound Blaster 16-bit Compatible Sound Card (Opti Chip Set), 4W-Mini Speakers, Grolier Ency., Animals, US & World Atlas, ChessMaster3000, Beacon Teaches Typing, w/2X CD ROM
**$199**

***Sound Blaster 16 SCSI Multimedia Kit***
Creative Lab Sound Blaster 16-Bit SCSI Sound Card, 4W-Mini Speakers, US & World Atlas, ChessMaster3000, Meavis Beacon Teaches Typing
w/NEC 510 3X (180ms) CD ROM ..... $380
w/Toshiba 3501B 4X CD ROM ..... $415

***NEW: Quad Speed Combo Kit***
Teac CD55 4X CD ROM (195ms,600KB/sec), Creative Lab Sound Blaster 16 Sound Card
A. 14CD Titles & 115 Watts Speakers ..... $348
or
B. 4CD Titles & 4 Watts Speakers ..... $299

Installation Available. Please Call for Details!

### Genisys Pentium 75 / 90 / 100 P5 "*MUSTANG*"

- ***Genisys Pentium 75 / 90 / 100*** System
- ***Intel Pentium*** CPU w/CPU Heat Sink and Cooling Fan
- ***8MB*** RAM and ***256K*** Cache Installed
- Medium Tower Case w/Power Supply
- ***Keytronic*** KT2000 101-Key Enhanced Keyboard
- 14" ***.28dp Non-Interlace Full Screen*** SVGA Monitor
- PCI Accelerator Video Adaptor w/1MB (Exp. to 2MB)
- IDE Hard Drive / Floppy Drive Controller w/2-Serial and 1-Parallel Ports
- ***420MB*** IDE Hard Drive
- 3.5" 1.44MB Floppy Drive
- Hi Resolution Mouse

**75MHz ..... $1359.00**
**90MHz ..... $1659.00**
**100MHz ..... CALL**

Monitor Upgrades
Special ViewSonic 15EX Digital, NI ..... Add $150
Shamrock 15" Digital NI. ..... Add $100
ViewSonic 17G 17" ..... Add $480
CTX 1765GM 17" Digital ..... Add $380

***Headquarters:*** *Genisys Micro Concepts Int'l*
*20425 E. Valley Blvd.*
*Walnut, CA 91789*
***Int'l Branch:*** *Genisys Ltd., Punane 6,*
*Tallinn, Estonia EE00336*

ПОСЫЛАЕМ КОМПЬЮТЕРЫ
В ПРИБАЛЬТИКУ И В СТРАНЫ СНГ
Note: International Quantity Purchases - we can drop ship to Eastern Bloc Locations and Russia.

# GENISYS MICRO CONCEPTS INT'L

## ASEAN COMPUTER TECHNOLOGIES, INC.


• 20425 E. VALLEY BLVD. • WALNUT, CALIFORNIA 91789 • TEL: (909) 598-2828 • FAX: (909) 598-5748


Genisys

FAX: (909) 598-5748

**ORDER HOTLINE**
**(909) 598-2828**

CUSTOMER SERVICE DEPT.
(909) 598-3498

ПОСЫЛАЕМ КОМПЬЮТЕРЫ В ПРИБАЛЬТИКУ И В СТРАНЫ СНГ

We sell wholesale computer systems & all components. Dropship to Russia/ Baltic regions/ Europe available. Please call for details & qty. discounts for export.

## GENISYS "WORKHORSES"
## HOME & OFFICE MACHINES TO FIT YOUR NEEDS

110V / 220V

### GENISYS 386SX40

- 386 SX-40 M/B w/2MB
- MINI TOWER W/P.S.
- 101 ENHANCED K/B
- 14" SVGA MONITOR (1024x768)
- 256K VGA Video Adaptor
- IDE CTRL & 2S/P/GAME
- 80 MB IDE HD
- 3.5" 1.44MB FD
- HI-RES MOUSE (MS COMPATIBLE)
- Perfect Workstations for Data Entry

**$499.00**

### GENISYS 386DX40

- 386 DX40 M/B (128K C) w/4MB RAM
- MINI TOWER W/P.S.
- 101 ENHANCED K/B
- 14" SVGA MONITOR (1024x768)
- 512K SVGA Video Adaptor
- IDE CTRL & 2S/P/GAME
- 125MB IDE HD
- 1.44MB FD
- HI-RES MOUSE (MS COMPATIBLE)

**$680.00**

### GENISYS 486SLC-66

- 66MHz IBM M/B w/MATH-CO,
- 4MB RAM
- MINI TOWER W/P.S.
- 101 ENHANCED K/B
- SVGA MONITOR (1024x768)
- 1MB Svga Video Adaptor
- IDE CTRL & 2S/P/GAME
- 125MB IDE HD & 1.44MB FD
- HI-RES MOUSE (MS COMPATIBLE)
- Ask for Multi-media Package

**$735.00**

* 1995 Special : Upgrade to 125MB to 270 MB IDE Hard Drive Add ..... $35.00

## MONTHLY HD SPECIALS

LIMITED QTY

| | |
|---|---|
| Conner/Quantum 420MB IDE | $169 |
| Conner/Quantum 540MB IDE | $189 |
| Quantum 730MB IDE | $239 |
| Maxtor 850MB IDE | $289 |
| Western Digital 1.08GByte IDE | $399 |
| 1.06GByte SCSI | $499 |
| 2.1GByte SCSI | $849 |
| 4.2GByte SCSI | $1499 |

Call for Volume Discounts


ПОСЫЛАЕМ КОМПЬЮТЕРЫ В ПРИБАЛЬТИКУ И В СТРАНЫ СНГ


## CASES W/P.S.

| | |
|---|---|
| Desktop w/230W p/s 6.5x16.75x17.25" | $89 |
| Mini Tower w/200W p/s | $53 |
| Mini Tower w/230W p/s w/digital display 12x16x7.25" | $78 |
| Med Tower H1/H2 w/230W p/s digital display 15x16x7.25" ("Qty 20+ $40) | $45 |
| Med Tower w/230W p/s,digital display 6.5x16.75x17.25" ("qty 20+ $46) | $52 |
| Full Tower w/250W p/s & digital display 24.5x17x7.5" | $68 |
| Full Tower w/250W p/s & dig. disp. w/2Fans | $78 |
| Super Slim Desktop Workstation | Call |
| Super Tower (File Server), 2 Fans + 10 bays w/300W p.s. w/wheels | $169 |

BLACK CASES

| | |
|---|---|
| Mini Tower w/230W p/s & dig. disp. ("qty 20+ $42) | $48 |
| Med Tower w/230W p/s & dig. disp. ("qty 20+$65) | $70 |
| Full Tower w/250W p/s & dig. disp. ("qty 20+ call) | $88 |
| Super Tower (File Server), 2 Fans + 10 bays w/300W p/s/ w/wheels | $199 |

## VIDEO DISPLAY

| | |
|---|---|
| HMC/UMC 15bit w/256K 800x600 VGA | $25.5 |
| OAK 087 1MB Graphics Accl. 1024x768 | $52 |
| Trident 9000 SVGA w/512K 1024x768 | $36 |
| Trident 8900 SVGA w/1MB 1024x768 | $59 |
| Trident 9440 VLB (1MB) | $68 |
| Cirrus Logic 5434 1MB PCI (exp.4MB) | $90 |
| Cirrus Logic 5428 1MB VLB Accel(exp. 2MB) | $68 |
| S3 (Stealth 24 compt.) VLB 1MB Accel | $68 |
| Mono Graphic w/Printer port | $15 |

Diamond Computer

| | |
|---|---|
| Stealth 24 VLB 1MB | $110 |
| Stealth 64 VLB 1MB/2MB | $140/180 |
| Stealth 64 VLB 2MB VRAM | $270 |
| Viper VLB 2MB | $238 |
| Stealth 32 PCI | $158 |
| Stealth 64 PCI 1MB/2MB DRAM (Special) | $129/179 |
| Stealth 64 PCI 2MB/4MB VRAM | $230/420 |
| Viper PCI 2MB | $240 |

Call for Other Video Display

## MODEMS + TAPE BACK-UP

| | |
|---|---|
| Conner Tape Back-up 250MB w/2M tape | $128 |
| Conner Tape Back-up 250MB (Ext.) | Call |
| Colorado Tape Back-up 250MB | $138 |
| Colorado Tape Back-up 350MB | $165 |
| Jumbo Tracker 250/350MB (Ext) | $295/379 |
| Colorado parallel port Tape Back-up External Drive Kit KE-09 (no adapter) | $78 |
| Tape Drive Adapter AB-11 (for ext.) | $35 |
| 3M Tape Cartridge 2120 UnFormatted | $18 |
| 3M Tape Cartridge 2120 UnFormatted (Minimum Purchase 5/Box) | $16.88 |

| | |
|---|---|
| 14,400 Int. Fax Modem (qty 20+ $49) | $68 |
| 14,400 Int. Voice Modem | $65 |
| 28,800 Int. Fax Modem (Hayes Compatible) | $139 |
| Intel 14,400 Fax Modem (Ext.) (Special) | $105 |
| US Robotics 14,400 Int/Ext Fax Modem | $99/130 |
| US Robotics 28,800 Internal Fax Modem | $218 |
| US Robotics 28,800 External Fax Modem | $238 |

## MOTHERBOARDS

386 ISA Main Board

| | |
|---|---|
| 386SX-40 w/CPU | $55 |
| 386DX-40 w/128K Cache w/CPU (Qty 20+ $80) | $85 |
| 386DX-40 w/Intel RapidCAD CPU & Intel RapidCAD Math Coprocessor | $98 |

486 VESA Local Bus Main Board

| | |
|---|---|
| IBM VLB 486SLC2-66 w/Math Coprocessor 64K Cache 30pin | $188 |
| 128K Cache 30pin | $178 |
| QDI/JM Green 486SX/DX VLB+128K Cache (30/72P) | $72 |
| QDI/JM Green 486SX/DX VLB+256K Cache PC Chip ZIF (30/72Pin) | $88 |
| Opti ZIF (30/72Pin) | $90 |
| VEGA 486VLB+256K Cache ZIF (30pin) (USA) | $130 |
| VEGA 486VLB+256K Cache ZIF (72pin) (USA) | $160 |

*Please specify 3.3V or 5V selectable Motherboard

| | |
|---|---|
| 486 CPU Heat Sink & Fan | $8 |

Pentium M/B w/o CPU

| | |
|---|---|
| Intel "Neptune Chipset" 90/100 PCI w/256K built-in IDE+2xHiSpeed+1xParallel | $295 |
| Opti P5-60/66 PCI + VLB w/256K Cache | $178 |
| Opti P5-60/66 PCI + VLB w/512K Cache | $218 |
| Opti P5-90/100 PCI + VLB w/256K Cache | $198 |
| Opti P5-90/100 PCI + VLB w/512K Cache | $239 |
| ALI P5-60/66 PCI (256K Cache) | $188 |
| SIS P5-90/100 PCI (256K Cache) | $178 |
| SIS P5-90/100 PCI (512K Cache) | $218 |

| | |
|---|---|
| Pentium CPU Heat Sink & Fan | $18 |

Please call for current CPU Price $$

## H/F CONTROLLERS

| | |
|---|---|
| VLB Super IDE ctrl. w/I/O (Qty 20+ $15) | $18 |
| VLB Enhance IDE w/I/O (4HD or 2H/2CD) | $28 |
| VLB Enhance Super IDE Ctrl. w/Hi-Speed I/O Bi-Directional Paralle Ports, 4HD/2FD | $48 |
| ISA IDE 2H/2F w/Hi-Speed I/O | $33 |
| ISA Super IDE 2H/2F w/AT I/O (Qty 20+ $9.5) | $13 |
| PCI IDE (4HD, Hard Drive Only) (Qty 20+ $20) | $26 |
| PCI IDE HD/FD + I/O | $35 |
| PCI SCSI Ctrl (NCR 810) | $60 |

PROMISE

| | |
|---|---|
| Promise ISA IDE w/512K (exp. 8.5MB) | $108 |
| Promise 4030 VLB IDE Cache(exp. 16MB) | $115 |

ADAPTEC

| | |
|---|---|
| 1522 ISA SCSI / 1522K w/Kit | $78/138 |
| 1542C/1542CK+ ISA SCSIw/Kit | $165/248 |
| 2842 VLB SCSI H/F w/o Kit / w/Kit | $189/248 |
| 2940 PCI SCSI Ctrl / 2940 PCI w/Kit | $199/288 |

## I/O CARDS

| | |
|---|---|
| High Speed AT I/O (Qty 20+ $20) | $25 |
| (16C550 comp., 2 serial/1 parallel ports) | |
| VLB Enhance IDE w/I/O (4HD or 2H/2CD) | $28 |
| Super IDE 2H/2F w/AT I/O (Qty 20+ $9.5) | $13 |
| ISA SuperIDE w/Hi-Speed I/O | $33 |
| VLB IDE ctrl. w/I/O (2H/2F,2s,p,g) (qty 20+ $15) | $18 |
| w/Hi-Speed I/O | $35 |
| Enhance VLB Super IDE Ctrl w/Hi-Speed I/O & Bi-Directional Parallel Port (4HDi2FD) | $48 |
| Printer card/Game card | $9/8 |

## KEYBOARDS

| | |
|---|---|
| BTC 101 Enhance (5S Series) | $20 |
| Keytronic 101 KT2000 (USA) | $35 |
| Fujitsu 4700 101 | $45 |
| Focus 2001 w/Dust Cover | $35 |
| Focus 8000 111 Keys w/Calculator (Soft) | $45 |
| Focus 7000 103 Keys w/Trackball | $38 |
| Focus 9000 128 Keys w/Calculator | $55 |
| BLACK ACT! 101 Enh. K/B | $42 |
| BLACK Focus 2001 101 Enh. K/B | $49 |

## MONITORS

ARCUS (Available in 14" & 15" Black Color) / MGC

| | Beige | Black |
|---|---|---|
| 14" 1468A (I) (.39 SVGA 1024x768) | $173 | N/A |
| 14" 1468 SVGA I (.28 1024x768) E2E | $190 | $235 |
| 14" 1468 SVGA NI (.28 1024x768) E2E | $210 | $255 |
| 15" SVGA NI (.28 1280x1024) F/S | $269 | N/A |
| 15" 1568 SVGA NI (.28 1280x1024) F/S Dig | $290 | $340 |

CTX (2-Yr Manufactures Warranty)

| | |
|---|---|
| 1451ES 14" NI (1024x768 ,28) | $228 |
| 1462GM 15" (NI .28 1024x768) | Call |
| 1562GM 15" (NI .28 1024x768,75Hz LR) | $298 |
| 1585GM 15" (NI .28 1024x768, Dig) | $318 |
| 1581LR 15" LR NI (1024x768,.28 F/S Limited Special) | $275 |
| 1765GM 17" Digital NI (1280x1024,.28) | $578 |

**ViewSonic**
Authorized Dealer

| | |
|---|---|
| 14" 6E SVGA NI (.28dp, 1024x768) | $245 |
| 15" 15ES SVGA NI (.28dp) | $310 |
| 15" 15EX SVGA NI (.28dp, Digital) | $335 |
| 15" 15G SVGA NI (.28dp) | $355 |
| 15" 15 SVGA NI (.28dp, Digital, 76Hz) (15PS) | $378 |
| 17" 17E SVGA NI (.28dp,1280x1024) | $648 |
| 17" 17G SVGA NI (Multi-Freq, .28dp,1280x1024) | $675 |
| 17" 17 SVGA NI (.27dp, Digital,76Hz,1600X1280) | $780 |
| 20" 20G SVGA NI (.28dp,Dig.) | $1188 |
| 21" 21PS SVGA NI (.28dp, Dig., 76Hz) | $1888 |

SHAMROCK

| | |
|---|---|
| 14" Full SVGA NI (1024x768,.28) | $218 |
| 1502 15" FST SVGA NI (1024x768,.28) (Dig) | $295 |

TTL Mono (9-Pin) / VGA Mono (15-Pin VGA)

| | |
|---|---|
| BTC 12" Amber TTL Mono | $78 |
| 14" TTL Mono PW/Amber | $82 |
| 14" Mono (B&W) VGA | $88 |
| 14" Mono (B&W) SVGA | $93 |

## MULTI MEDIA (CD ROM / SOUND CARDS)

| | |
|---|---|
| Panasonic 562/3 (2X Speed) CD ROM | $125 |
| Sony 55E (IDE Intr) 2X Speed | $115 |
| Sony 55E (IDE Intr) 2X Speed (Black) | $135 |
| Multi CD Interface (Controls Sony/Mitsumi/Panasonic) | $12 |
| NEC 310 (3X Speed) SCSI | $280 |
| w/Encarta (Limited Supply) | $320 |
| Teac Quad (4X Speed, Panasonic Interface) | $189 |
| Toshiba 3501B Quad (4X Speed) CD ROM (SCSI) | $200 |
| Creative Lab Sound Blaster 16 Basic | $75 |
| Creative Lab Sound Blaster 16 MCD | $98 |
| w/ASP (Advance Signal Processor) | $165 |
| Creative Lab Sound Blaster 16 SCSI | $130 |
| w/ASP (Advance Signal Processor) | $195 |
| Opti Chip 16-Bit Sound Card (SB16 MCD Compatible) (Great Value) | $75 |
| Misc. Audio Cable (p/s, specify CD ROM) | $6 |

## MICE & TRACKBALLS

| | |
|---|---|
| Leadgen Hi-res Mouse(Serial) | $10 |
| Logitech Dexxa Hi-res Mouse | $18 |
| Truemouse TX/AX 300 (Serial) w/mouse pad | $18 |
| Truedox Trackball TB300 | $38 |
| Microsoft Mouse Serial/Bus | $38/65 |
| BLACK AX300 (Serial) Hi-res Mouse | $22 |
| Mouse Pad | $2 |

## HARD DISKS/FLOPPY DRIVES

| | |
|---|---|
| Conner Peripherals 270MB IDE | $155 |
| Conner Peripherals 420MB IDE | $175 |
| Conner Peripherals 540MB IDE | $198 |
| Conner Peripherals 850MB IDE | $260 |
| Conner Peripherals 1.06GByte SCSI-II | $510 |
| Conner Peripherals 4.2GByte SCSI-II | Call |
| Maxtor 420MB IDE | $178 |
| Maxtor 540MB IDE | $198 |
| dMaxtor 1.2GByte IDE | Call |
| NEC 540MB IDE (special) | Call |
| Quantum 540MB IDE | $182 |
| Quantum 540MB SCSI | $238 |
| Quantum 730MB IDE | $248 |
| Quantum 1.08GByte SCSI-II | $539 |
| Quantum 2.0GByte SCSI-II | $909 |
| WD Caviar 2420 420MB IDE (11ms) | $188 |
| WD Caviar 2540 540MB IDE (11ms) | $219 |
| WD Caviar 730MB IDE | $280 |
| WD Caviar 850MB IDE | Call |
| WD Caviar 1.08Gig IDE | $399 |
| Samsung 420MB IDE | $178 |
| Samsung 540MB IDE (Special) | $198 |

| | |
|---|---|
| Teac (Beige) | $41 $44 |
| Teac (Black) | $51 $51 |
| NEC / Mitsumi | $42 $38 |
| Teac FD50S 2-in-1 Combo (1.2+1.44MB) | $55 |
| 1.44 Floppy Drive Kit (Beige/Black) | $36 |
| Hard Drive 5.25" Mounting Frame | $6 |

## Miscellaneous

| | |
|---|---|
| UL Power Surge Panel Protector | $19 |
| Power Strip Surge Protector | $5 |
| IDE Cable | $5 |
| 2HD SCSI Cable | $8 |
| 3HD SCSI Cable | $9 |
| 5HD SCSI Cable | $11 |
| 6' RS232 Serial cable (M-M / M-F) | $10 |
| 6' Parallel Printer Cable | $6 |
| 15' Parallel Printer Cable | $12 |
| Ethernet Terminator | $7 |

**Minimum order $300 or Qty 10+. Call for Dealer Qty Discounts and other products (CPU's, RAM, P.S., etc) prices.**

TERMS:1year warranty on parts & labor. Printers & monitors warranty thru manufacturer. All sales on RAM/CPU's,MONITORS & PRINTERS are final. NO REFUND! All returns are subjected to our approval & must have prior authorization. Return items must be in good condition & in its original packing shipped prepaid & insured. All refunds or credits are less freight & bank charges. All refund items must be returned within 14 days of invoice. There will be a restocking charge of 20% after the 7 days period & within 14 days of invoice. Not responsible for any typographical errors. Price & availability subject to change without any notice. Prices are COD cash/cashiers chk.

# MAGICTEK COMPUTERS

## FOR EXPERT SERVICE CALL OUR TECH SUPPORT LINE
## GUARANTEED 24 HOUR TURNAROUND TIME
## IN OUR SIXTH YEAR OF BUSINESS

# MONTHLY SPECIALS!

### ZyXEL V.32 bis
### 16.8Kbps U-1496E MODEM/FAX

**ONLY $275 (w/Purchase of Any System)**

## PENTIUM PCI 90MHz

- PCI Pentium 90MHz 256K Cache
- 4 PCI, 4 ISA Slots
- 8 Meg Installed Expandable to 128MB
- 850 Meg Hard Drive (Conner)
- IDE Controller (Enhanced) PCI
- 1.2 & 1.44 Floppy Drive (TEAC)
- AT I/O (2S, 1P, 1G) (16550 Chip)
- PCI Graphic Card 2 Meg
- 15" Monitor (1280x1024, N-I) w/Digital Control (Smile)
- Midtower Case w/230W Power Supply
- DOS 6.2 w/Manuals
- 101 Enhanced Keyboard (Maxi)

**$1995**

**100MHz Available.....CALL**

## 486DXII-66MHz MULTIMEDIA SYSTEM

- 486DXII-66MHz CPU (Intel) (Zif Socket)
- 256K External Cache (SIS Chipset)
- Built-In Math Co-Processor & 8K RAM Cache
- 4 Meg Installed Expandable to 128 Meg On Board
- 540MB IDE Hard Drive
- IDE Controller 32 Bit VLB
- 1.44 Floppy Drive (TEAC)
- AT I/O, 2 Serial, 1 Parallel, 1 Game Ports
- Super VGA Card w/1024K 32 Bit VLB
- Super VGA Monitor Non-Interlaced (.28dpi)
- 101 Enhanced Keyboard (Maxi)
- Mid Tower Case & 230W Power Supply
- DOS 6.2 w/Manuals
- Sound Blaster
- Speaker
- Microphone
- Panasonic CD ROM
- CD Titles

**$1359**

## 486DXII-66MHz VLB / 256K CACHE

- 486DXII-66MHz CPU (Intel) (Zif Socket)
- 256K External Cache (SIS Chipset)
- Built-In Math Co-Processor & 8K RAM Cache
- 4 Meg Installed Expandable to 128 Meg On Board
- 420MB IDE Hard Drive
- IDE Controller 32 Bit VLB
- 1.44 Floppy Drive (TEAC)
- AT I/O, 2 Serial, 1 Parallel, 1 Game Ports
- Super VGA Card w/1024K 32 Bit VLB
- Super VGA Monitor Non-Interlaced (.28dpi)
- 101 Enhanced Keyboard (Maxi)
- Mid Tower Case & 230W Power Supply
- DOS 6.2 w/Manuals

**$1095**

**DX2-80MHz Available.....CALL**
**DX4-100MHz Available.....CALL**
**PCI Local Bus Available .....CALL**

## NOTEBOOK:

- 486SX-33MHz (Intel)
- 4MB RAM
- 1.44MB Drive
- 120MB Hard Disk
- VGA Screen (Mono)
- 2 Serial, 1 Parallel
- Trackball
- Carrying Bag

**$1150**

**486DX-33MHz.....CALL**
**486DX-66MHz.....CALL**
**COLOR & CD NOTEBOOKS NOW AVAILABLE!**

## CD-ROM

| | |
|---|---|
| Acer IDE 1x2 Speed CD ROM | $99 |
| Panasonic (Mitsushita) CD ROM (562) | 125 |
| CD Software 3CD's (14 Titles) | 40 |
| TEAC Quad Speed CD (IDE) | 199 |
| Toshiba 3501 4X (SCSI) | 285 |
| NEC 3X (510) (SCSI) | 225 |
| ***CD TITLES AVAILABLE*** | ***CALL*** |

## SOUND CARDS

| | |
|---|---|
| Acer Sound Magic MCD Sound Card | $69 |
| Sound Blaster AWE 32 | 275 |
| Sound Blaster 16 MCD | 75 |
| SB 16 Digital School House | 269 |
| Sound Blaster 16 SCSI-2 | 95 |
| Sound Blaster 16 ASP Chip | 69 |
| Other Models | CALL |

## VIDEO CARDS

| | |
|---|---|
| VGA 512K, 16 Bits | $39 |
| Cirrus Logic 1MG VGA | 69 |
| VESA Local Bus Orchid Kelvin 64 | 145 |
| VLB Trident Chipset | 69 |
| VLB Cirrus Logic VGA | 75 |
| All VESA Local Bus Video Cards Available | CALL |
| All PCI Local Bus Video Cards Available | CALL |
| PCI ATi Mach 64 w/2 Meg VRAM | 295 |

## MONITORS NEW!

**(VIEWSONIC AUTHORIZED RESELLER)**

| | |
|---|---|
| ViewSonic 15" | **CALL FOR BEST PRICE!** |
| ViewSonic 17" | |
| ViewSonic 20" | |
| ViewSonic 21" | |
| ViewSonic 20G PS *(NEW!)* | |
| ViewSonic 15G 15", .28dp, 1024x768, 72Hz Refresh *(NEW!)* | 375 |
| ViewSonic 6E 14", .28dp, 1024x768, N/I | 255 |
| ViewSonic 17G 17", .28dp, 1280x1024, 72Hz Refresh, N/I | 725 |
| Smile 15", 1280x1024, w/Digital Control | 325 |
| MAG 17" MX17F | 725 |
| Optiquest | CALL |
| Arcus 14884 14" SVGA .39 | 189 |
| VGA Mono 14" | 95 |
| Mono Amber 14" | 82 |
| Acrus 1458 Non-Interlaced 14" SVGA | 225 |
| ViewSonic VS127 Speaker | 130 |

## PRINTERS:

| | |
|---|---|
| Panasonic 1150 | $139 |
| Panasonic 2130 | 215 |
| Panasonic 4400 | 475 |
| Epson All Models | CALL |
| HP Laser Printer All Models | CALL |
| Okidata All Models | CALL |

## KEYBOARDS:

| | |
|---|---|
| Maxi-Switch | $32 |
| Fujitsu 4720, 601KB | 38 |
| Focus 2001 | 34 |
| BTC 5330SX | 19 |
| Keytronic BE (Big enter) | 29 |
| Focus 9000 | 59 |
| Focus 8000 | 37 |
| 101 Enhanced Keyboard | 15 |
| Focus 6000 | 25 |
| Microsoft Nature Keyboard | 89 |

## CASES:

| | |
|---|---|
| Mini Tower w/Digital | $49 |
| Mid Tower w/Digital | 69 |
| Big Tower w/Digital 230W | 95 |
| Big Tower w/Digital (10 Spaces) 250UL | 135 |

## COLORADO TAPE DRIVES:

| | |
|---|---|
| 250MB | $160 |
| 350MB | 175 |
| DC 2120 Tape XIMAT | 15 |
| Trakker 350MB | 325 |
| MicroSolutions Backup | 330 |

## MOUSE:

| | |
|---|---|
| Logitech | $42 |
| Microsoft | 35 |
| Portable Trackball | 59 |
| Serial Mouse | 12 |
| DEXXA Mouse | 19 |

**MEMORY CHIPS/MATH COPROCESSORS CALL!**

## HARD DISK:

| | |
|---|---|
| Quantum | CALL |
| Maxtor | CALL |
| Conner | CALL |
| Western Digital | CALL |
| HP 1.0GB SCSI | $495 |

## MISCELLANEOUS:

| | |
|---|---|
| AT I/O w/16550 chip | $32 |
| Adaptec SCSI 1542C | 179 |
| V-L IDE w/Cache (512K Upgrade to 16.5MB) | 125 |
| TEAC Floppy Drive (1.2M) | 45 |
| TEAC Floppy Drive (1.44M) | 35 |
| V-L IDE I/O Controller | 19 |
| TEAC 2-in-1 | 89 |
| V-L SCSI Controller | 105 |
| SmartLink 9624 Fax/Modem | 35 |
| SmartLink 14.14 Fax/Modem | 59 |
| SmartLink 28.8 Fax/Modem Internal | 175 |

**1 Year Parts & 2 Year Labor Warranty For Systems**

MasterCard VISA

**Business Hours:** Monday-Friday: 9:30 A.M. - 7:00 P.M.
Saturday: 10:00 A.M. - 3:30 P.M.

# ZyXEL

## The Intelligent Modem That's a Wise Investment. Leading Industry Publications Are Giving the ZyXEL Family of Modems Rave Reviews.

Data Comm Magazine Top Performer — ZyXel U-1496 Plus

Computer Shopper — July 1993 — ZyXel U-1496E Plus, ZyXel U-1496 Plus Enhanced Top 10 List

Boardwatch Magazine — November 1992 — ZyXel U-1496, ZyXel U-1496E

Winter 1992 — ZyXel U-1496 Awarded 5 NeXTWORLD Cubes

Data Based 200 — June 1993 — ZyXEL U-1496

Network World — May 10, 1993 — ZyXEL U-1496E

Byte — ZyXEL U-1496E Plus

Byte — ZyXEL U-1496E

PC Digest Ratings Report — May 1993 — ZyXEL U-1496, ZyXEL U-1496E

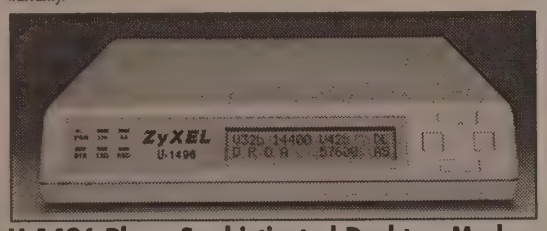
PC Magazine Editor's Choice — June 29, 1993 — ZyXEL U-1496E Plus

PC Professional — February, 1993 — ZyXEL U-1496E Plus

PC Professional — November, 1993 — ZyXEL U-1496E

### MORE VALUE FOR THE PRICE

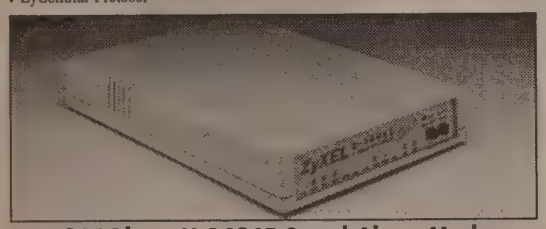
ZyXEL award winning modems provide high performance and reliability with a full array of features at affordable prices and backs them with a 5-year parts and labor warranty.**




### U-1496 Plus - Sophisticated Desktop Modem

- 19.2Kbps Data/14.4Kbps Fax
- Front panel 20x2 LCD Display and Menu Control
- 2/4 Wire Leased Lines and 2-Wire Dial-Up
- On-Line Line Condition Monitoring
- Line Probing Techniques
- ZyCellular Protocol

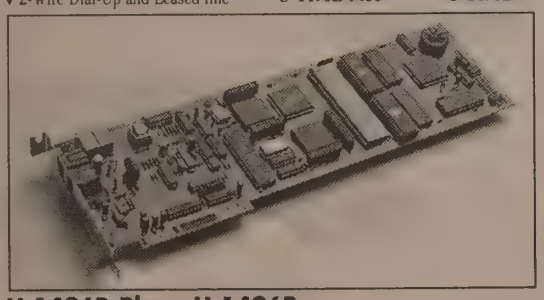
**$499** U-1496 Plus



### U-1496E Plus - U-1496E Stand Alone Modem

- 12 LED Lights to Report Modem Operation
- Data/Voice Toggle Switch
- Async/Sync Transmissions
- 2-Wire Dial-Up and Leased line

**$349** U-1496E Plus **$249** U-1496E



### U-1496B Plus - U-1496B Plug-In Cards

- 8-bit Full Length ISA Card
- Includes the 16550 UART Chip

**$339** U-1496B Plus **$239** U-1496B

### STANDARD FEATURES

- 19.2Kbps Ultra High-Speed (Plus Series)
- 16.8Kbps Data/14.4Kbps Fax, EIA Class 2
- Line Probing Techniques*
- Asynchronous/Synchronous Mode
- Digitized Voice Capabilities
- Automatic Data/Fax/Voice Detection
- Fast Retrain with Auto Fall-Forward/Fall-Back
- Caller ID and Distinctive Ring Detection
- Remote Configuration
- Call-Back Security with Password Protection

### U-1496P - Rugged Portable/Cellular Modem

- 16.8Kbps Data/14.4Kbps Fax Over Land Lines
- 14.4Kbps Data, Fax and Voice Over Cellular
- Asynchronous/Synchronous Over Land, Cellular
- Autoswitch Between Land and Cellular Networks
- Able to Run with AC or DC Power
- Durable Steel Case: 7.8"x2.8"x1.0"

**$350** U-1496P

### ZyVoice Switch Box

Allows users to record and play back voice mail messages easily and effectively with superior voice quality.

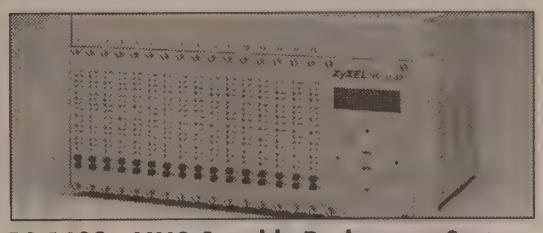
### VoiceFax Software

Find out more about our VoiceFax Software which offers data*, fax and voice answering machine capabilities for DOS, Windows and Macintosh.

*Plus Series only. **2 year warranty on Rackmount Systems. All trademarks and registered trademarks are the property of their respective owners. Specifications and prices subject to change without notification. +DOS version only.

### THEY WORK WHEREVER YOU DO

ZyXEL systems operate in all environments, including Windows®, DOS®, OS/2®, Macintosh®, UNIX®, NeXT®, Amiga®, and IBM®'s AS/400 and RS/6000. ZyXEL supports V.32bis/V.32 as well as industry standard data compression and error correction protocols.



### RS-1602 - NMS Capable Rackmount System

- Holds up to 16 U-1496R Modem Cards
- 20x4 LCD Display for Configuration & Monitoring
- Permits Hot-Swapping of Modem Cards

**$900** RS-1602

### U-1496R - Rackmount Modem Card

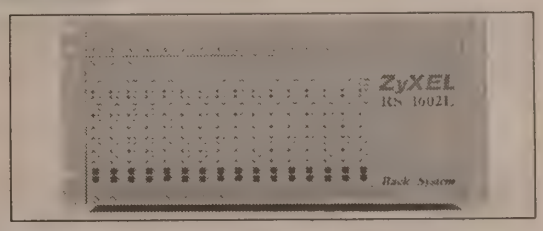
- 19.2Kbps Data/14.4Kbps Fax
- Line Probing Techniques
- On-Line Line Condition Monitoring
- 2/4 Wire Leased Lines and 2 Wire Dial-Up
- ZyCellular Protocol

**$479** U-1496R

### Network Management System Software

Remotely configure and control up to 256 racks (maximum of 4,096 modems) from a single PC screen. Runs under Windows 3.x. Excellent for network analysis and planning.

**$700** NMS




### RS-1602E - Rackmount System

- Redundant Power Supply Capability
- 15 LED Lights Report Card Operation
- Permits Hot-Swapping of Modem Cards
- Holds up to 16 U-1496RE Plus or U-1496RE Modem Cards

**$499** RS-1602E **$349** U-1496RE Plus **$249** U-1496RE

# LOCAL AREA NETWORKING Interface Cards & Accessories

### NETWARE

| | | | |
|---|---|---|---|
| Windows NT 3.5 | | | $295 |
| 3.12 | 5 | User | 595 |
| 3.12 | 10 | User | 1195 |
| | 25 | User | 1795 |
| | 50 | User | 2395 |
| NetWare Lite | | | 85 |
| Lantastic AI 5.0 | | | 85 |
| Window Work Group | | | CALL |

FOR ALL NOVELL UPGRADES...CALL!

### ETHERNET ADAPTERS ALL MAJOR BRAND NAMES AVAILABLE PLEASE CALL!

| | |
|---|---|
| 8 Port Ethernet 10 Base-T Concentrator | $175 |
| 16 Port Ethernet 10 Base-T Concentrator | 350 |
| Pocket Ethernet | 175 |
| 16 Bit Ethernet Cox 10 Base-T Combo | 45 |
| Jumperless 16 Bit Ethernet Combo | 39 |

### PRINTER SERVICE ALL MAJOR BRAND NAMES AVAILABLE PLEASE CALL!

Netquest Support 2-P/1-S Netware/TCP/IP..$310

### ARCNET/ETHERNET HUBS

| | |
|---|---|
| Arcnet 8 Port Active Hub | $145 |
| Arcnet 4 Port Active Hub Card | 65 |
| Arcnet 4 Port Passive Hub | 15 |
| Arcnet 8 Port Twisted Pair Active Hub | 145 |

Prices subject to change without notice. Not responsible for typographical errors.

# MAGICTEK COMPUTERS

1218 E. Katella, Anaheim, CA 92805
Tel: 714/939-9220
Fax: 714/939-9221 • BBS: 714/939-9219

# ONE STOP FOR

## CUSTOM SOFTWARE PROGRAMMING

- Our consultants will help you determine your software needs and design a program that will run efficiently on your hardware and improve your productivity. We bundle, set up, and install equipment only after our consultants have identified your needs for hardware, software and training.
- We do text imaging, optical character recognition
- Our consultants will guide you towards your final solutions

Novell Certified NetWare Engineer

MICROSOFT. WINDOWS NT. READY-TO-RUN

We've built our good name and strong reputation on supporting many different system needs. Whether you are a large corporation with a complicated network or an end-user with one system, we know how to handle your requirements. We work with our satisfied customers to identify the best system for staying productive. Occasionally systems need service and we're available to keep your systems running efficiently and effectively. Let us know what you want to accomplish with your new system and you'll see why our business grows month after month.

**Network • Hardware • Software • Service & Training**

**LANtastic**

## NETWORKING, MULTIMEDIA AND BEYOND

### MOTHERBOARDS W/CPU

| | |
|---|---|
| PCI PENTIUM 90MHz (INTEL) w/256K | $959 |
| PCI P5-75MHz 256K w/CPU | 549 |
| PCI PENTIUM 90MHz 256K w/CPU | 819 |
| PCI P5-100MHz 256K w/CPU | 979 |
| PCI 486-66DX2 256K w/CPU | 299 |
| VLB 486DX2-66 256K w/CPU | 285 |
| IBM VLB 486DLC-66MHz 128K | 199 |
| 486SX-33 256K w/CPU | 189 |

### VIDEO CARDS

| | |
|---|---|
| DIAMOND STEALTH 64 PCI w/2MB DRAM/VRAM | $179/269 |
| DIAMOND STEALTH 64 VLB w/2MB DRAM/VRAM | 189/269 |
| ATI WIN TURBO MACH 64 VLB DRAM/VRAM 2MB | 189/269 |
| ATI WIN TURBO MACH 64 PCI DRAM/VRAM 2MB | 179/269 |
| ATI Mach 64 4MB VRAM | 499 |
| #9 GXE DRAM 2MB PCI/VLB | 189 |
| #9 GXE PRO VRAM 2MB PCI/VLB | 269 |
| IMAGINE 128 BIT 4MB VRAM PCI | 699 |
| GENOA 1MB VLB | 99 |
| TRIDENT 9400 SVGA 1MB VESA | 69 |
| MGP | 15 |

### HARD DRIVES

| | |
|---|---|
| 260MB IDE/250MB | $165 |
| 420MB IDE | 185 |
| 540MB IDE | 205 |
| 720MB IDE | 255 |
| 820MB IDE | 275 |
| 1.05GB IDE | 420 |
| 540MB SCSI II | 279 |
| 1.05GB SCSI II After Format | 545 |
| 2.0GB SCSI II | 969 |

### CONTROLLERS

| | |
|---|---|
| 16 BIT IDE w/ IO | $18 |
| PCI IDE CONTROLLER GENERIC | 29 |
| VLB IDE 2S, 1P w/2 UART 16550 COMP. CONTROLLER 2.88MB | 65 |
| PCI SCSI CONTROLLER GENERIC | 85 |
| ADAPTEC 1522BK (BARE) | 85 |
| ADAPTEC 1522BK w/KIT | 149 |
| ADAPTEC 1542BK (BARE) | 189 |
| ADAPTEC 1542BK w/KIT | 259 |
| ADAPTEC 2742 BARE EISA SCSI | 260 |
| ADAPTEC 2842 SCSI VESA w/KIT | 259 |
| ADAPTEC 2940 (BARE), PCI SCSI | 219 |
| ADAPTEC 2940 w/KIT, PCI SCSI | 300 |
| ADAPTEC 2940W BARE | 265 |
| ADAPTEC 2940W BARE w/KIT | 360 |
| VLB IDE I/O 2HD/2FD | 29 |

### MONITORS

| | |
|---|---|
| 14" SVGA .28 NI F/S | $220 |
| KFC 15" NI NO DIGITAL | 289 |
| ACER 15" MONITOR DIGITAL | 330 |
| ACER 17" MONITOR DIGITAL | 609 |
| MAG DX-15F GREEN | 320 |
| MAG DX-17F GREEN | 599 |
| MAG MX 15F 15" | 425 |
| MAG MX 17FG 17" | 799 |
| MAG T17 | 939 |
| NEC XE 15 | CALL |
| NEC XE 17" | CALL |
| VIEWSONIC 6E 14" NI | 269 |
| VIEWSONIC 15ES | 319 |
| VIEWSONIC 15G | 359 |
| VIEWSONIC 15 | 429 |
| VIEWSONIC 17E | 689 |
| VIEWSONIC 17G | 723 |
| VIEWSONIC 17 | 859 |
| VIEWSONIC 21 | 1449 |

### ETHERNET CARDS

| | |
|---|---|
| NE2000 COMPATIBLE COMBO | $39 |
| INTEL ETHEREXPRESS/ COMBO | 129 |
| 3 COM C3 509 ETHERNET 16 BIT | 129 |
| 3 COM ETHERLINK III PCMCIA | 199 |
| ETHERNET NOVELL | 129 |
| ETHERNET CONCENTRATOR 8 PORTS | 199 |
| ETHERNET CONCENTRATOR 12 PORTS | 399 |

### MULTIMEDIA

**PACKAGE #1** ..... $239
Mitsumi/Sony/Panasonic CD ROM IDE 300KB/250ms 16 Bit Sound Blaster, 12 CD Titles, 2 Mini Speakers

**PACKAGE #2** ..... $329
TEAC 4X IDE CD ROM w/16 Bit Sound Blaster 16, 12 CD Titles, 2 Mini Speakers

**PACKAGE #3** ..... $449
Toshiba/Plextor 4X 3501B SCSI CD ROM 450KB/200ms w/16 Bit Sound Blaster 16 SCSI-2, 12 CD Titles, 2 Mini Speakers

Terms and Conditions: All UPS shipping charges and service fees are non-refundable. 14 day money back guarantee. 15% restocking charge before 30 days. After 30 days no refund. Printers and monitors warranty by manufacturer. CD titles and software are not refundable after opened. Prices are reflective of cash and check discounts. Prices are subject to change without notice.

**QUALITY COMPUTERS, INC.**
13001 Ramona Blvd., #C • Baldwin Park, CA 91706
Sales (818) 960-1933 • Tech Support (818) 960-6093 • Fax (818) 337-5025
Hours: Monday–Friday 9:00–6:00, Saturday 10:00–4:00, Sunday 10:00-4:00

**KINGSLEY COMPUTER, INC.**
15711 E. Valley Blvd. • City of Industry, CA 91744
Sales (818) 369-2295 • Tech Support (818) 369-0224 • Fax (818) 369-6818
Business Hours: Mon–Fri 9:00–6:00

# TOTAL SOLUTIONS

## Home Multimedia System

- 4MB RAM
- 256K, Pentium P24T Ready Socket
- Double Speed CD ROM Player
- 16 Bit Sound Card, 2 Mini Speakers, 12 CD Titles
- 540MB, 13ms IDE Hard Drive
- 1.44MB Floppy Drive
- Fast VESA LB IDE Controller (50x Faster than Standard Controller)
- Super VESA LB Accelerator Video 1MB (16.8M Colors & Up to 1280 x 1024)
- 14" SVGA Color Monitor NI Flicker-Free
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Desktop or Tower Case
- Free Hi-Res 1450 DPI Mouse
- Extra Heat Sink Fan

**DOS & Windows Package .....$90**
**486DX2-66MHz .....$1229**
**486DX4-75MHz .....$1249**
**486DX4-100MHz .....$1309**

## 1995 Multimedia System

- 8MB RAM 256K Cache
- 1.44MB Floppy Drive
- 520MB, 11ms IDE Hard Drive
- PCI Enhanced IDE Interface
- PCI Diamond Stealth 64 1MB Enhanced Accelerator
- 2 Serial, 1 Parallel, 1 Game Port
- 15" 1280 x 1024 Flat Screen Monitor
- 101 Enhanced Keyboard
- Desktop or Tower Case
- Free Hi-Res Serial Mouse
- 2X CD ROM, 16 Bit Sound Card
- 12 CD Titles, 2 Mini Speakers
- Extra Heat Sink Fan

**486DX2-66MHz .... $1549**
**486DX4-75MHz .... $1569**
**Pentium-75MHz .... $1799**
**Pentium-90MHz .... $2069**
**Pentium-100MHz ... $2229**

## 4X Multimedia System

- 8MB RAM 256K Cache
- 1.44MB Floppy Drive
- 540MB 13ms IDE Hard Drive
- PCI Enhanced IDE Interface
- 2 Serial, 1 Parallel, 1 Game Port
- Diamond Stealth 64 PCI w/2MB
- 15" 1280 x 1024 Flat Screen Monitor
- 101 Enhanced Keyboard
- Desktop or Tower Case
- Free Hi-Res Serial Mouse
- 4X CD ROM
- 16 Bit Sound Card
- 12 CD Titles, 2 Mini Speakers
- Extra Heat Sink Fan

**DOS & Windows Package..... $90**
**486DX2-66MHz .... $1639**
**486DX4-75MHz .... $1659**
**Pentium-75MHz .... $1889**
**Pentium-90MHz .... $2159**
**Pentium-100MHz ... $2319**

## PCI Hurricane Machine

- 8MB RAM 256K Cache
- 850MB IDE Hard Drive
- 1.44MB Floppy Drive
- PCI Enhanced IDE Interface
- Diamond Stealth 64 2MB
- 15" 1280 x 1024 Flat Screen Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- Enhanced 101 Keyboard
- Desktop or Tower Case
- Free Hi-Res Serial Mouse
- Extra Heat Sink Fan

**486DX2-66 ..... $1419**
**486DX4-75MHz .... $1469**
**Pentium-75MHz .... $1669**
**Pentium-90MHz .... $1939**
**Pentium-100MHz ... $2099**

## PCI Dream Machine

- 8MB RAM 256K Cache
- 1GB IDE Hard Drive
- 1.44MB Floppy Drive
- PCI Enhanced IDE Interface
- Diamond Stealth 64 2MB
- 17" MAG 1280 x 1024 Flat Screen Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- Enhanced 101 Keyboard
- Desktop or Tower Case
- Free Hi-Res Serial Mouse
- Extra Heat Sink Fan

**486DX2-66MHz .... $1899**
**486DX4-75MHz .... $1919**
**Pentium-75MHz .... $2149**
**Pentium-90MHz .... $2419**
**Pentium-100MHz ... $2579**

**Quality Computer (818) 960-1933 • Kingsley Computer (818) 369-2295**

Telecommuting *continued from page 44*

nap, and having a meal with the family.

First consider how many hours you will work each day you're telecommuting. Then, block out exactly which hours you'll be working. Then fill in the blocks with all the tasks you want to accomplish.

Although it's natural to want to spend time with your children when you're working from home, kids can easily absorb far too much of your workday. Don't think telecommuting allows you to avoid other arrangements for child care—particularly if you have young ones. Schedule time for your kids, and time for work. Help the young ones understand you're no more available during hours you're working as a telecommuter than you are during hours you're working in the main office.

**By noting the hours you actually work and the projects that occupy your time, you can begin to get a sense not only of when you are strongest and most productive, but when you are weakest and most prone to procrastination.**

One basic principle is to discuss your telecommuting work schedule with everyone who lives with you. Like your colleagues at work, there may be pressure on them to change their routines to accommodate your new flexibility.

Take their concerns seriously, and work with them to develop remedies or solutions to the problems your telecommuting might be causing.

One of the biggest problem areas can arise from a major benefit: telecommuting shaves a good deal of commuting time from your day. You'll be surprised to discover what great expectations other people may have of how you're going to spend this suddenly "found" time. All too often, you shave an hour a day from commuting but find that others expect you to pick up two hours a day of extra chores!

## Telecommuting And Intellectual Property

Pamela Samuelson, professor of law at the University of Pittsburgh, has some strong ideas regarding the Clinton Administration's Working Group on Intellectual Property Rights, and its *Preliminary Draft Report on Intellectual Property and the National Information Infrastructure.*

The topic is important to telecommuters because so much of what they do has the potential to be transmitted over the National Information Infrastructure (NII) at some point in a project's lifecycle. Anyone who is developing original material needs and wants reasonable assurance that their work won't be stolen and mis-


BAR CODE IS OUR SPECIALTY

INPUT AUTOMATION, INC.

The single source for all your bar code system needs: hardware, software, consulting and system design. Our philosophy is based on two principles: high-quality industrial products, and the best technical support available.

DESIGN AND CONSULTING

To create your optimal solution, an Input Automation consultant will design a complete system, and then recommend equipment that fills your exact needs.

We will not be satisfied until our bar code system meets your demanding standards.

*Call today for free info.& product information*

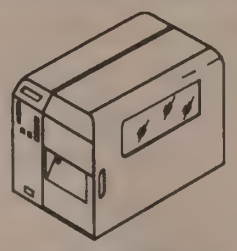
*(Dealer inquiries welcome)*

**Call for an appointment to see our Showroom**

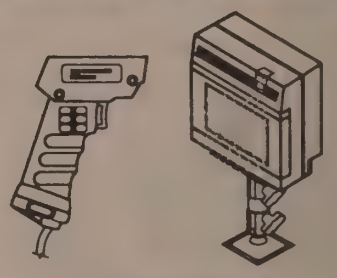
Southern California
Tel: (310) 539-3598
Fax: (310) 530-2849
Tel: (714) 374-4511

Northern California
Tel: (510) 685-6563
Fax: (510) 685-2513

INPUT automation, inc.
Authorized Value-Added Distributor

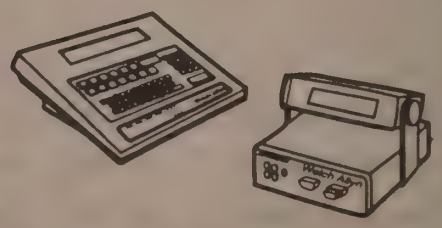


**Bar Code Label Printers, Software, and Supplies**



**Laser Scanners. Omnidirectional, hand-held/hands-free, fixed mount.**

**Portable Data Collection Terminals**



**Welch Allyn bar code readers/scanners. Over 15 years leadership in bar code manufacturing.**

*Visa & M/C Accepted*

*© 1992 Copyright Input Automation, Inc. All rights reserved. All product names mentioned are trademarks of their respective manufacturers. Input Automation, Inc. recognizes these trademarks*

## Telecommuting *continued...*

used or made available to people who were never intended to see it. At the same time, no one wants to see the Constitution or centuries of copyright law overturned by draconian measures to protect intellectual property rights from digitized thievery.

According to Professor Samuelson, digital networked environments pose particularly severe challenges to intellectual property rights because they make it so simple for anyone to copy original works and distribute them instantaneously, at virtually no cost.

Obviously, this would not only undermine the incentives of authors and their publishers, but would severely handicap the security of original works created and distributed by anyone who is not working at an organization's main office.

However, Dr. Samuelson disagrees with President Clinton's Working Group about proposed changes to existing copyright law they characterize as "minor clarifications and changes."

She regards it as curious that the Report omits any discussion of how existing digital networks like the Internet have supported present-day notions and purposes of copyright. Far from "empty pipelines awaiting content," today's networks are awash in sensitive and valuable material whose publishers and authors are as fully protected as they are by other media.

"Since its inception," says Samuelson, "the Internet has greatly facilitated and enhanced communication and learning of the very sort that copyright law is supposed to promote. It has enabled researchers to gather and share data more easily, to engage in collaborative work at remote locations, to criticize and refine one another's work, and to make research results and the like available...."

She believes the vast majority of Net users are law-abiding citizens who generally pursue only established, fair, and reasonable uses of copyrighted materials.

But the Working Group Report takes a more paranoid view of copyright infringement, and fails to recognize both formal and informal mechanisms within cyberspace that already reflect and uphold the intention of existing copyright law.

For example, BBS operators actively—and successfully—discourage copyright infringement. "Netiquette" also holds that theft of other people's work is bad form.

"The Draft Report should acknowledge and build upon the strengths of existing digital networked environments," says Samuelson. She'd like to see the Working Group more carefully consider the overall impact of their recommendations, and seek ways to adopt existing laws to the new medium, rather than advocate dramatic changes to the law.

"It is simply not true," she says, "that the Report recommends only minor clarifications and changes to copyright law." Samuelson suggests that network users, like you, learn more about the policy issues involved with digital networks and copyright law, so they can join the policy debate and contribute their views toward a solution that balances public interest and copyright protection.

Readers who email me can receive more information on where to find Dr. Samuelson's article and the Draft Report in question.

**PREMIUM PERFORMANCE.**

Gigatek's DC2120 QIC-80 Formatted Data Cartridges.
With 120 MB Capacity/250 MB Compressed
and a Lifetime Warranty.
Designed for High-Performance Back-Ups.

GIGATEK
MEMORY SYSTEMS, INC.

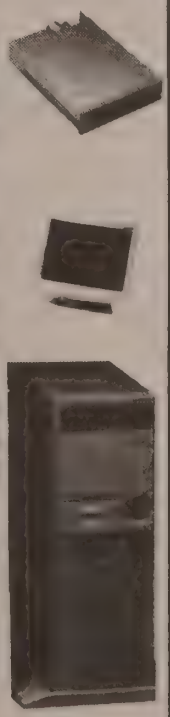
**Committed to Providing You With Storage Solutions You Can Depend On.**

**Contact Your Local Dealer For Special Introductory Offer!**

*K & M International*

**Presents the lowest prices in computer sales**

| | | |
|---|---|---|
| ***Motherboards*** | | |
| Air 586 CEP w/o Cpu 90 Mhz | | $589 |
| Air 586 EP w/o Cpu 60 MHZ | | $499 |
| Air 486 SH 256k w/o Cpu | | $119 |
| Biostar Pentium w/o Cpu 90 MHZ | | $229 |
| Biotech 486 2 56k w/o Cpu | | $95 |
| ***Hard Disk Drives*** | | |
| W. D CA 3100 IDE | 1 G.B | $405 |
| W.D CA 2450 IDE | 540 G.B | $215 |
| Conner IDE | 540 M.B | $199 |
| Conner IDE | 420 M.B. | $185 |
| ***Monitors*** | | |
| Magitronic 17" SVGA NI .28 | | $535 |
| Magitronic "15 SVGA NI .28 | | $299 |
| Magitronic "14 SVGA NI .28 | | $215 |
| ***Modems*** | | |
| Smartlink 14.4 Fax/Modem | | $69 |
| Sevel (micro direct) 14.4 Fax/Modem | | $59 |
| ***Cases*** | | |
| Mid tower w/Door | | $69 |



**5858 Hollywood Blvd., # 400**
**Los Angeles, CA 90028**
**(213) 465 - 6146**

-- Deals of the Month --

**Compaq LTE Lite** 425C, 425E, 433C
**IBM** ThinkPad 350, 350C, 360, PS/NOTE
**16 Meg Memory Upgrade Card**
**Save $200!! $495.00**

**386DX/33 $119.00**
Bare Bones System

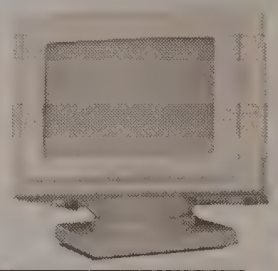
386DX/33 Bare Bones System Features:

- 6 Bay Fullsize Tower Case
  1 3.5" Internal Hard Disk Mount
- 230 Watt P/S
- Floor Stand
- Passive Backplane type MLB Installed
- Quadtel 386 BIOS w/Auto HD Detection
- COM1/2, LPT1, IDE & Floppy Controllers
  Built in! - Just add Video, HD & Floppy!

**386DX/33 Passive Backplane Motherboard Kit.....$59.00**
**Quadtel 386 BIOS w/Auto HD Detection**
**COM1 & 2, LPT1, IDE & Floppy controllers built in!**
**Upgrade your existing backplane type system or install in virtually any desktop or tower case.**
**Motherboard is a full length card.**

**Olivetti 9"**
Refurb. New CRT installed. Excellent for small places. Makes a great POS terminal. Use for word processing, accounting and more! Standard VGA 640x480 resolution. Excellent sharp Picture.

9" Mono VGA $99



Specials • Specials • Specials • Specials
System Upgrades
387-33 Math Coprocessor .....$25.00
16 Bit 256K VGA Card..$25.00 ... w/512K ....$35.00
Full Size 6 5.25 Bay Tower Case w/230W P.S. .$49.00
**External Stereo Speaker Set (Labtec / Black) .$10.99**

**3.5" DD or HD Disks**
**.19¢ ea.**
DSDD (360K) 100 for .....$12.00
DSHD (1.2M) 100 for .....$15.00
DSDD (720K) 50 for .....$9.50
DSHD (1.44M) 50 for .....$9.50

NEW • USED • APPLE/MAC & IBM
MODEMS • MONITORS • MEMORY • HARD DISKS • SERVICE • PARTS

**Alltech Electronics Co**
4 Southern California Locations
1300 East Edinger Ave #D, Santa Ana. 714/543-5011
2018 West Lomita BLVD. #1, Lomita 310/539-2260
1401 El Camino Real #103, Oceanside 619/721-0093
Mail Order/Warehouse, Oceanside 619/724-2404



Telecommuting *continued...*

> If you can make yourself adhere to reasonable telecommuting work hours, there's a good chance you won't procrastinate as a telecommuter any more than when you're in the main office.

## More On Telecommunities

The Institute for the Study of Distributed Work, Oakland, CA, is now actively studying the technology diffusion activities taking place in the United States, and considering how they might impact the quality of life for large numbers of people.

Specifically, Dr. Grantham of the Institute has begun a study to determine what substance there might be behind all the talk about how distance work and distance education, telecommuting, virtual offices and virtual employees, and the National Information Infrastructure are going to change our lives. Perhaps we are merely responding to self-serving media hype fueled by opportunistic corporate and political agendas.

He quickly discovered that there is very little serious research actually taking place. For example, at the last annual meeting of the American Sociological Association only one paper in several hundred was devoted to the impact of technology on community development. Similarly, the average newspaper devotes far more space to covering the latest multimedia animation toy than to discussing the serious uses of technology in education, work, or improving our communities.

## But There Is Much To Study

For example, the deployment of a networked information infrastructure is beginning to change the way people form communities of interests, maintain their senses of identity (as individuals and groups), and interact with one another in everyday life.

In the past, I've referred more than once to telecommuters who are gathering themselves in intentional communities in various parts of the world, which Dr. Grantham is now calling "telecommunities" to describe the electronic integration of work, education, and civic action.

In a "telecommunity," citizens interact with one another through technology (as well as by other means), and experience each other more directly than traditional letters or phone calls make possible. This mediated interaction complements existing face-to-face relationships, and fosters the formation of larger and more dense social networks. It creates "virtual communities" where people organize themselves in work, learning, or civic action groups though separated in time and space.

The Institute for the Study of Distributed Work is investigating present-day telecommunity experiences. So far, it is looking at some thirty separate community development efforts in the United States investigating, planning, or conducting pilot "telecommunity" programs. Next month, I'll invite Dr. Grantham to share a little more of what he's learning about our emerging "telecommunities." ■

Copyright © 1995 by Robert Moskowitz. All rights reserved.

# Your Computer Super Source!

## PCI SCSI-3 Super Star

- Intel Pentium Processor
- 8MB RAM 256K Fast bCache
- 1GB **SCSI-3** Hard Drive
- 1.44MB High Density Floppy
- PCI **Adaptec 2940W SCSI-3** Controller
- PCI Diamond Stealth 64 w/ 2MB
- 17" MAG DX 17 SVGA Color Monitor .26 Dot Pitch-Flat Screen-1280X 1024 NI.
- 2 Serial/ 1 Parallel/ 1 Game Ports
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**Pentium 100 $3249**
**Pentium 90 $3049**
**Pentium 60 $2849**

## PCI Pentium Multimedia Star

- Intel Pentium Processor
- 8MB Ram 256K Fast Cache
- 850MB **Enhanced IDE** Hard Drive
- 1.44MB High Density Floppy
- PCI **Enhanced IDE** Controller
- PCI Diamond Stealth 64 w/ 2MB
- 17" MAG DX 17 SVGA Color Monitor .26 Dot Pitch-Flat Screen-1280x1024 NI.
- 2 Serial/ 1 Parallel/ 1 Game Ports
- Quad Speed CD ROM (4x)
- 16 Bit Sound Card
- Amplified Stereo Speakers
- 4 CD Titles
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**Pentium 100 $2949**
**Pentium 90 $2749**
**Pentium 60 $2549**

## PCI Pentium Multimedia Special

- Intel Pentium Processor
- 8MB Ram 256K Fast Cache
- 540MB **Enhanced IDE** Hard Drive
- 1.44MB High Density Floppy
- PCI **Enhanced IDE** Controller
- PCI Graphics Accelerator w/ 1MB
- 15" SVGA Color Monitor .28 Dot Pitch Flat Screen-Low Radiation-Non Interlaced
- 2 Serial/ 1 Parallel/ 1 Game Ports
- Double Speed CD ROM
- 16 Bit Sound Card
- Amplified Stereo Speakers
- 4 CD Titles
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**Pentium 100 $2229**
**Pentium 90 $2029**
**Pentium 60 $1829**

## PCI Pentium Special

- Intel Pentium Processor
- 8MB Ram 256K Fast Cache
- 540MB **Enhanced IDE** Hard Drive
- 1.44MB High Density Floppy
- PCI **Enhanced IDE** Controller
- PCI Graphics Accelerator w/ 1MB
- 14" SVGA Color Monitor .28 Dot Pitch Low Radiation-1024x768 NI.
- 2 Serial/ 1 Parallel/ 1 Game Ports
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**Pentium 100 $1969**
**Pentium 90 $1769**
**Pentium 60 $1569**

## 486 VLB Multimedia Star

- 486 DX 2/66 Mhz
- 8MB Ram 256K Fast Cache
- 540MB **Enhanced IDE** Hard Drive
- 1.44MB High Density Floppy
- 32 Bit VLB HD/FD Controller
- 32 Bit VLB Graphics Accelerator w/ 1MB
- 15" SVGA Color Monitor .28 Dot Pitch Flat Screen-Low Radiation-Non Interlaced
- 2 Serial 1 Parallel/ 1 Game Ports
- Double Speed CD ROM
- 16 Bit Sound Card
- Amplified Stereo Speakers
- 4 CD Titles
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**$1499**

## 486 VLB Special

- 486 DX 2/66 Mhz
- 4MB Ram 256K Fast Cache
- 420MB IDE Hard Drive
- 1.44MB High Density Floppy
- 32 Bit VLB HD/FD Controller
- 32 Bit VLB Graphics Accelerator w/ 1MB
- 14" SVGA Color Monitor .28 Dot Pitch Low Radiation-1024x768 NI.
- 2 Serial/ 1 Parallel/ 1 Game Ports
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**$999**

*Custom Configurations - Our Specialty!*

**Government**
**Business**
**School**
**P/O Welcome**

**Business Leasing Available**

**Call for Upgrade Options & CD Titles**

MICROSOFT WINDOWS READY-TO RUN

BBB

IDE

VISA

**C.S. Source** 1-818-330-6863 FAX:818 330-6807
15338 E. Valley Blvd.
City of Industry, CA 91746
Mon-Fri (9:00am-6:00pm) • Sat (10:00am-4:00pm)

Prices Subject to Change Without Notice.

# IT'S A SMALL PRICE TO PAY FOR

# 4X CD-ROM POWER.

intel inside

## MultiMedia Tornado 4x

- **Media Magic 16-Bit Stereo Sound Card**
- **2 Amplified Stereo Speakers**
- **Microsoft Works, MS Money, & MS EnCarta (CD)**
- Quad Speed 4X CD-ROM Drive
- **16MB** RAM & **256K** Cache
- **730MB** 10ms **PCI Enhanced IDE** Hard Drive
- One Floppy Drive (3.5" or 5.25")
- **PCI** Local Bus **Enhanced IDE** HDD Controller
- **64-bit** PCI **Diamond Stealth 64 (1MB)** Accelerator (The best accelerator for both DOS & Windows)
- **15" Non-Interlaced .28mm Flat Screen Monitor**
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard
- Hi-Resolution 400 DPI Serial Mouse

| | |
|---|---|
| **486DX4-75** | **$1995** PCI |
| **PENTIUM-75** | **$2245** |
| **PENTIUM-90** | **$2545** |
| **PENTIUM-100** | **$2745** |

- 14,400 Baud FaxModem w. **Voice Mail** Add $90
- 17" Flat Screen .28mm 1280x1024 Monitor Add $320
- Larger **850MB / 1275MB** IDE Drive Add $60 / $250

## PCI Best Buy

- Intel486™ or Pentium™ Processor
- Ultra-Fast **256K** Cache; Up to 512K
- **8MB** RAM & Expandable to 128MB
- **540MB** 12ms **PCI Enhanced IDE** Hard Drive
- One Floppy Drive (3.5" or 5.25")
- **PCI** Local Bus **Enhanced IDE** HDD Controller
- PCI **Diamond Stealth SE (1MB)** Accelerator (Diamond - A Top Choice for Performance)
- **15" Non-Interlaced .28mm Flat Screen Monitor (36% larger edge to edge display)**
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard
- Hi-Resolution 400 DPI Serial Mouse
- EPA Energy Star Compliant

| | |
|---|---|
| **486DX2-66** | **$1375** PCI |
| **486DX4-75** | **$1425** PCI |
| **PENTIUM-75** | **$1625** |
| **PENTIUM-90** | **$1895** |

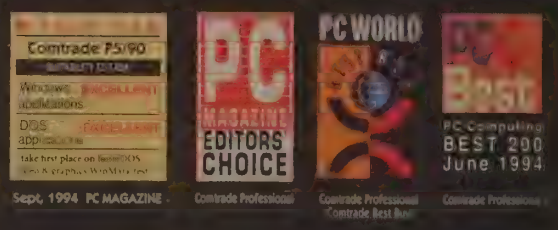
- 16-Bit Stereo Sound Card & 2 Speakers Add $95
- 17" Flat Screen .28mm 1280x1024 Monitor Add $320
- **2X CD-ROM / 4X CD-ROM** Drive Add $135 / **$200**

## PCI Lightning 4x

- Ultra-Fast 256K Cache; Up to 512K
- 8MB RAM & Expandable to 128MB
- 730MB IDE Hard Drive
- Quad Speed 4X CD-ROM (600KB/Sec) Drive
- One Floppy Drive (3.5" or 5.25")
- PCI Enhanced IDE HD Controller
- PCI Diamond Stealth 64 (2MB) Accelerator (Best accelerator for both DOS & Windows)
- 15" Flat Screen NI Monitor .28mm
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard
- Hi-Resolution 400 DPI Serial Mouse

| | |
|---|---|
| **486DX2-66** | **$1645** |
| **486DX4-75** | **$1695** |
| **486DX4-100** | **$1795** |
| **PENTIUM-75** | **$1895** |
| **PENTIUM-90** | **$2195** |
| **PENTIUM-100** | **$2395** |

- Instant MultiMedia (16-Bit Stereo Sound Card & Speakers) Add $95
- 14,400 / 28,800 Baud FaxModem with WinFax Add $90 / $170
- 420MB / 850MB Tape Backup Add $200 / $320




**818.961.6688**

**COMTRADE**

"The Lightning PC"

GSA# GS00K94AG55087

# PENTIUM POWER TO GO.

intel inside
pentium

- **Built-in SoundCard, Microphone & Speaker**
This notebook brings the exciting world of multimedia sound anywhere and everywhere you happen to be - with built-in SoundBlaster™ compatible Sound-Card, speaker(s), microphone, & Line-in / Line out jacks.

- **Local Bus Graphics Accelerator & Vivid Color**
The local-bus WinNote is just as powerful as your desktop - just a lot lighter. Now work in powerful applications with LB speed & color.

- **340MB IDE Drive – Minimum** (520MB / 720MB Available)
With today's applications and multimedia graphics requiring so much storage space, we equip you with a huge 340MB HDD - Standard.

- **Two PCMCIA Slots (Type II & III)**
Open up the doors of flexibility with PCMCIA - allowing instant Fax, Modem, Networking, Credit Card Size hard drives, and more.

- **Plenty of Ports for Connectivity**
Flexible VersaPort allows you to connect standard, bidirectional, or (EPP) parallel device. Plus serial Port, external VGA, and external OS/2 keyboard ports.

- **APM (Advanced Power Management)**
The notebook's power management system supports five power conservation modes: CPU Doze, LCD Dim, Hard Disk Sleep, System Sleep, and System Suspend.

- **Build a Desktop PC with ReadyDock** (optional)
In one easy move, your Win-Note connects to your printer, external OS/2 keyboard, mouse, external amplified speakers, and 1024x768 monitor.

- **ISO-9002 Certified Quality**
Comtrade notebooks are manufactured in an ISO-9002 certified manufacturing facility to ensure the products meet the strictest world-class quality requirements.

## COMPACT BUT POWERFUL.

### Comtrade Sound Win-Note (Vivid Color)

| | | | | |
|---|---|---|---|---|
| 486DX2-50 | 4MB RAM | 340MB HDD | D-STN (9.5") | $1795 |
| 486DX4-75 | 4MB RAM | 340MB HDD | D-STN (9.5") | $1895 |
| 486DX4-75 | 8MB RAM | 340MB HDD | D-STN (9.5") | $2095 |
| 486DX4-100 | 4MB RAM | 340MB HDD | D-STN (9.5") | $1995 |
| 486DX4-100 | 8MB RAM | 340MB HDD | D-STN (9.5") | $2195 |
| 486DX4-100 | 12MB RAM | 520MB HDD | Active TFT | $3395 |

| Pentium-75 | Pentium-90 | Pentium-90 |
|---|---|---|
| 8MB RAM / 340MB HDD | 8MB RAM / 340MB HDD | 8MB RAM / 540MB HDD |
| **$2595** | **$2895** | **$3095** |

### Standard Features

- 4MB / 8MB RAM (exp to 20 / 40MB)
- User Replaceable 340MB Hard Drive
- 9.5" Dual Scan STN Color Display (10.3" for Pentium)
- 3.5" 1.44MB Floppy Drive
- Local Bus Windows Accelerator
- Enhanced Audio Sound System: Built-in Microphone & Speaker External Jacks for Line In & Line Out
- Removable NI-MH Battery
- Docking, Serial, & (EPP) Parallel Port
- Two Type II / One Type III PCMCIA Slot
- Ergonomic Keyboard with Hand Rest
- TrackPoint for Pentium; TrackBall for 486
- Carrying Case & AC Adapter
- One Year Parts & Labor Warranty

VIVID '890 QUICK SHIP

### Best Buy Options

| | |
|---|---|
| NI-MH Battery (1-hr quick charge) | $120 |
| ReadyDock Replicator | $120 |
| **340MB to 520MB / 720MB Drive** | **$200 / $400** |
| 4MB RAM Card | $220 |
| 8MB RAM Card | $460 |
| 14,400 PCMCIA FaxModem | $160 |
| **9.5" Active Matrix Display** | **$890** |

# Computer Max
## SYSTEMS

### 386SX/40MHz BAREBONES

- 1MB RAM
- 230W Power Supply
- 1.44MB Floppy Drive
- 2 Serial/1 Parallel/1 Game Port
- Mini Tower Case
- Digital Display
- Hard & Floppy Controller
- 101 Keyboard

$175

### 486DLC/40MHz

- 1MB RAM
- Digital Display
- 8 Expansion Slots
- Math Coprocessor
- Mini Tower Case
- 230W Power Supply
- 1.44MB Floppy Drive
- Hard & Floppy Controller
- 2 Serial/1 Parallel/1 Game Port
- 101 Keyboard
- 128K Cache Expandable to 256K Cache

$239

### 386DX/40MHz BAREBONES

- 1MB RAM
- Mini Tower Case
- Digital Display
- Hard & Floppy Controller
- 101 Keyboard
- 2 Serial/1 Parallel/1 Game Port
- 128K Cache
- 230W Power Supply
- 1.44MB Floppy Drive

$209

### 386DX/40MHz

- AMD CPU, 128K Cache
- 1.44 3.5" Floppy Disk Drive
- FDD & IDE Controller
- 170MB IDE Hard Drive
- 14" .28dp SVGA Monitor
- 2MB RAM
- Mini Tower Case, 230 U/L & Digital Display
- 512K SVGA Video Card
- 2 Serial/1 Parallel/1 Game Port
- 101 Enhanced Keyboard
- DOS 6.22

$589

### 486SLC/33MHz Multimedia System

- 2MB RAM
- 1.44 Floppy Disk Drive
- Mini Tower Case w/Digital Display
- 230W UL Power Supply
- 101 Enhanced Mechanical K/B
- SVGA Video Card
- IDE/FDD Controller
- 2 Serial/1 Parallel/1 Game
- 170MB IDE Drive
- Sony Double Speed CD-ROM
- 16bit Stereo Sound Card
- Windows 3.11 & DOS 6.22
- 3-Button Hi-Resolution Mouse
- Microphone + Speakers Included
- 14" SVGA Monitor 1024x768

$779

### 486 BASIC VLB SYSTEM

- 486 Local Bus Motherboard
- 1.44 Floppy Disk Drive
- 4MB RAM
- 250MB IDE Drive
- VLB IDE/FDD Controller
- 2 Serial/1 Parallel/1 Game Port
- 1MB High Color Window Accelerator
- 14" SVGA .28dp Monitor
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Mini Tower Case w/Digital Display
- 230W UL Power Supply

486SX/25MHz.....$765
486SX/33MHz.....$798
486DX/33MHz.....$855
486DX2/66MHz.....$839

### INTEL 486DX/33MHz VLB

- Intel CPU, 256K Cache
- 1.44 3.5" Floppy Disk Drive
- 2 Serial/1 Parallel/1 Game Port
- Hi-Resolution Mouse
- 32 bit VLB Windows Accelerator up to 2MB
- 14" .28dp SVGA Monitor
- Mini Tower Case, 230 U/L & Digital Display
- P24 Zif Socket, Upgradable to 100MHz
- 250MB IDE Hard Drive
- 32bit VLB IDE Controller
- 101 Enhanced Keyboard
- DOS 6.22 & Windows 3.11

$849

### 486 BUSINESS SYSTEM

- 486 Local Bus Motherboard
- 1.44 Floppy Disk Drive
- 4MB RAM
- 420MB IDE Drive
- VLB IDE/FDD Controller
- 2 Serial/1 Parallel/1 Game Port
- VLB 1MB Window Accelerator
- 14" SVGA .28dp Monitor
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Mini Tower Case w/Digital Display
- 230W UL Power Supply

[illegible]/33MHz.....$825
[illegible]2/66MHz.....$848
[illegible]2/80MHz.....$876
[illegible]/100MHz.....$928

### PENTIUM SYSTEM

- Pentium 60MHz
- PCI/VLB Motherboard
- 256K Cache 30/72 Pin Memory Configuration
- Enhanced VLB Controller
- 8MB RAM
- Fast 16550 I/O Ports
- Enhanced 540MB IDE Drive
- Diamond Stealth 64 SVGA Card
- 15" Digital Control SVGA Monitor
- 1.44 Floppy Disk Drive
- 101 Focus 2001 Keyboard w/Cover
- Microsoft Mouse
- Medium Tower Case w/Display
- 230W U/L Power Supply

$1569

### 486 MULTIMEDIA SYSTEM

- 486 Local Bus Motherboard
- 1.44 Floppy Disk Drive
- 8MB RAM
- 540MB IDE Drive
- VLB IDE/FDD Controller
- 2 Serial/1 Parallel/1 Game Port
- 1MB High Color Window Accelerator
- 15" SVGA .28dp N.I. Monitor
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Medium Tower Case w/Digital Display
- 230W UL Power Supply
- 16bit Stereo Sound Card
- 2x CD ROM Drive
- Shielded Speaker System
- Microphone + 12 CD Titles

[illegible]
[illegible]

**714 • 953 • 0233**

Santa Ana Location
1322 E. EDINGER, SANTA ANA, CA 92705
We are located directly behind Guadalajara Restaurant
We are not visible from the street.
STORE HOURS: M-F 9AM-5PM

2 LOCATIONS

PRICES SUBJECT TO CHANGE W/OUT NOTICE, NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS

**714 • 452 • 0065**

23552 Commerce Center Drive, Suite Q
Laguna Hills, CA 92653
STORE HOURS: M-F 9:30AM-5:30PM
• Located Behind Furniture Row •

## PHOEBE

96/24 Internal Voice Mail Fax Modem ..... $39
14.4 Internal/External Fax Modem Winfax Lite, Cables ..... 55/85
14.4 Internal Voice Mail Fax Modem ..... 89
28.8 Internal/External Fax Modem V.34 ..... 139/159

## US ROBOTICS

14.4 Int./Ext. Fax Modem ..... $99/119
28.8 V.34 Int/Ext ..... 225/249

## SUPRA

14.4 Int. Fax Modem Express Plus Int./Ext. ..... $89/109
14.4 Int./Ext. Fax Modem LC ..... 115/129
14.4 Fax Modem MAC ..... 139
28.8 Int./Ext. Fax Modem V.34 ..... 199/259

## ZOOM

14.4 Int/Ext. Fax Modem ..... $99/129
14.4 Internal Fax Modem w/Voice Mail ..... 139
28.8 Int/Ext. Fax Modem ..... 149/179

## SOUND CARDS

**ZOLTRIX AUDIO PLUS 1600** - 8bit Stereo Sound Card, Includes: Interface Card + Speakers + Joystick + Games ..... $59
**ZOLTRIX AUDIO PLUS** - 16bit Sound Card, Includes: Interface Card ..... 69
**SBC 16 MCD** - 16bit Sound Card, Multi-Interface, 12 CD Titles ..... 89
**MEDIA VISION JAZZ** - 16bit Sound Card Includes: Interface Card ..... 59

## VOICE MAIL

**14.4 Internal Fax Modem Multiple Mailboxes, Customized Greetings, Forward to Pager, Remote Retrieval and More!**

**$109!**

*24 INTERNAL CARDINAL MODEM W/1 MONTH FREE PRODIGY OFFER!! ONLY $19*

INSTALLATION +$10

*FREE SOFTWARE W/ ANY PURCHASE!!*

## MULTIMEDIA KITS

### MEDIA DEPOT MULTIMEDIA

2x CD ROM Acer • Amplified Speakers
Microphone • Acer 16bit Sound Card

**$229**

14 CD TITLES:
Grolier's Encyclopedia '95, Chessmaster, Mavis Beacon, U.S. Atlas, World Atlas, Robocop 3D, F-29 Retaliator, Pushover, Epic, Might & Magic III, D/Generation, Contraption Zack, The Chessmaster 2100 & Life & Death II

### MICROSOFT HOME MULTIMEDIA

2x CD ROM Sanyo • Amplified Speakers
Microphone • 16bit Sound Card

**$269**

6 CD TITLES:
Encarta '94, Dangerous Animals, Microsoft Money, Works, Arcades, Entertainment Pak

### CD ROM KIT

Sony 2X CD ROM
16bit Stereo Sound Blaster Compatible Sound Card • Speakers • Microphone

**$199**

## CD TITLES

**CHILDREN'S CD's**

Aesop's Fables ..... $10
Animal Alphabet ..... 15
Animation Tour ..... 8
Arthur's Teacher Trouble ..... 15
Beauty and the Beast ..... 15
Birds and How They Grow ..... 10
Butterflies ..... 10
Cinderella ..... 10
Dinosaurs and Space Adventure ..... 15
Dr. Fun Pak ..... 8
Farm Animals ..... 10
Goldilocks and the Three Bears ..... 15
Grandma and Me ..... 15
Heather Hits Her First Home Run ..... 10
Kids Farm ..... 10
Kids Rhymes ..... 8
I Can Spell ..... 8
Long Hard Day on the Ranch ..... 10
Mixed Up Mother Goose ..... 10
My Talking Dictionary ..... 15
Paper Bag Princess ..... 10
Power Rangers ..... 15
Puzzle Puzzle ..... 8
Rainbow Children's Park ..... 8
Scary Poems ..... 10
Spiders ..... 10
Tale of Benjamin Bunny ..... 10
Tale of Peter Rabbit ..... 10
Tree Through the Seasons ..... 10
Whales ..... 10
What Air Can Do ..... 10

3D Animania, 5 Star Games Multimedia & Graphics, 5 Star Games Educational Games, 5 Star Games Windows Edition,1400 Programs, 2700 Type Fonts, 51 Window Games Volume 1, All You Can Play, Animation and Games, Battle Chess, Clip Art Library, Communication Master, Computer Supermarket, Desktop Publishers Dream 94, Dr. Schueler's Home Medical Advisor, Family Fun, Fonts, Games Galore, Icon Library, Image Compendium, Image Library, Microsoft Jumpstart, Midi & Wave Workshop, Midi & Wave Classical Workshop, Movie Select for Windows, PC Karaoke, Rock Rap 'n' Roll, Shareware Supreme, Sound Library II, Space Quest, Top 101, Travel to Space, United Computers, Windows Programs, Windows Applications, Windows Shareware Gold, World of Education ..... $8

Shareware Medley, Image World II, Mario is Missing, Kids Read, U.S. Atlas, World Atlas, Ocean Below, Space Shuttle, Game Palace, Dinosaurs, Doom, Doom II, Game Studio, Image Compendium ..... $10

Monkey Island, Aladdin, Animals, Bibles & Religion, Bible Study and Games, Bible (Children's Guide), Blue Force, Capitol Hill, Challenge Pak, Day of the Tentacle, Family Doctor, F-15 Strike Eagle, F-117A Stealth Bomber, Grolier's Encyclopedia, Guidebook to Mathematics, Iron Helix, Indiana Jones, Languages of the World, Mayo Clinic, Jurassic Park, Return to Zork, Carmen San Diego, Mad Dog McCree, Family Health Book, Dinosaurs Encyclopedia, Kings Quest V, Mad Dog, Monkey Island, Mega Race, Mavis Beacon, Multimedia World History, Monarch Notes, Mozart, Operation Desert Storm, Power Rangers, Presidents, Protostar, Quantum Gate, Quick in Spanish, Ringworld, Space Shuttle, Stun and Run, Twain's World, U.S. Atlas, U.S. Air Power, U.S. Battle Tanks, U.S. History, The Presidents, U.S. Bombers, U.S. Aircraft Carriers, Sports Illustrated 1994, Dinosaurs Encyclopedia, World Atlas, Zork, 7th Quest ..... $15

Mad Dog II, Microsoft Money, Microsoft Golf, Microsoft Musical, Star Wars ..... $19

Star Trek, Time Table of History ..... $20

Compton's Encyclopedia, Encarta '94, Slim City ..... $25

Myst ..... $29

Microsoft Encarta '95 ..... $35

### MANY MORE CD's!

Compton's Encyclopedia 1994/1995 ..... $19/25

**Challenge Pak** - Robo Cop 3D, F-29 Retaliator, Push Over, Epic, Might & Magic, D/Generation, Contraption Zack, The Chessmaster 2100, Life & Death II, The Brains ..... $19

**Eureka Pak** - Compton's Interactive Encyclopedia, World Atlas, US Atlas, Chessmaster 3000, Mavis Beacon Teaches Typing, Etc. ..... $39

**Legend Pak (15 Titles)** - Cinderella, Thomas Snowsuit, RoboCop 3D, F-29 Retaliator, Pushover, Epic, Might & Magic III, D/Generation, Contraption Zack, The Chessmaster 2100, Life & Death II, The Paper Bag Princess, Mud Puddle, The Tale of Benjamin Bunny, Scary Poems ..... $39

**ADULT CD's**

Hot Line Taboo, Men's Club, Obsessions, Pretty Baby, Pink Lady, Motion & Picture, Cartoon Fantasy, Moving Fantasies, Insatiable Woman, Visual Fantasies, Pearl (Movie), Movies for the Night, Day Dream, Adult Movie Collection, Hot Shareware, Hurt Angel, Kiss Me, Devil or Angel, Fun with Tits ..... $8

Reveal a Secret, Sensual Pleasure, She, Sweet Body, Temptation, The Uniform Collection, Woman, Erotic, Garden Secret, Oriental Hit Night, Sakura, La Traviata, Professional Beauties, World's Best Breasts, XXX Over 1,000 Pictures ..... $15

A Pussy Called Wanda II, Adult Interactive Sampler 20, American Girls, Girls of Vivid, High Volume Nude, Super Model Go Wild, Erotic, Screen Dreams, Oral Sex, Sexual Encounters, Lesbian Lust, Beautiful Women, Steamy Sex, Anal Attractions ..... $18

OVER 1,000 To Choose From . . . ONLY $1.99
Games, Educational, Pictures, X-rated

## MISCELLANEOUS

### MONITORS

Glass Monitor Screen Filter ..... $10
14" Monochrome Monitor ..... 79
14" VGA Monitor .39 ..... 159
14" VGA Monitor .39 Full Screen ..... 179
14" SVGA Monitor .28 ..... 179
14" SVGA Monitor .28 Full Screen ..... 199
14" Monitor .28 N-I ..... 199
14" SVGA Monitor .28 N-I Full Screen ..... 209
15" SVGA Monitor .28 N-I Flat Screen ..... 275
15" SVGA Monitor .28 N-I Digital Control ..... 297

### VIDEO DISPLAY CARDS

Monochrome Graphics Cars ..... $12
256K SVGA HMO ..... 24
512K SVGA Trident ..... 35
1 Meg SVGA Trident ..... 55
1 Meg VLB Trident ..... 65
1 Meg VLB Cirrus Logic ..... 69

### MOTHERBOARDS

386SX-40MHz w/CPU ..... $55
486SX-33MHz w/CPU ..... 145
386DX-40MHz w/CPU ..... 82
486DX2-66MHz VLB w/CPU ..... 239
486DX2-80MHz VLB w/CPU ..... 279
486DX-100MHz VLB w/CPU ..... 339
486DLC w/CPU ..... 119
Pentium 60/66MHz w/CPU ..... 599/613
Pentium 90MHz w/CPU ..... 829
Intel 90MHz w/CPU ..... 929

### CONTROLLER CARDS

IDE Controller 2S/2P/1G ..... $12
I/O Card VESA Local Bus ..... 20
I/O 16550 U-Art ..... 25
I/O 16550 VESA Local Bus I/O ..... 49
Printer Card ..... 12
Floppy IDE Controller ..... 12

### KEYBOARDS

101 Soft Touch ..... $15
101 Click ..... 19
Chicony Soft Touch 5311 ..... 19
Chicony Click 5181 ..... 29
Focus Click 2001 ..... 32

### CASES

Mini Tower 200W P/S LED ..... $35
Desktop 200W P/S LED ..... 45
Medium Tower 230W P/S LED ..... 55
Full Tower 250W P/S LED ..... 69
200W Power Supply ..... 25

### FLOPPY

1.44/1.2 ..... $33/43
1.44 TEAC/1.2 TEAC ..... 39/45

### HARD DRIVES

170MB ..... $125
250MB ..... 139
420MB ..... 179
540MB ..... 215

### MICE

Genius Mouse
Easy Mouse ..... $9.00
Clixes Mouse ..... 15
Mouse 3-Plus (FREE Software) ..... 29
Hi-Point ..... 39
New Track ..... 39
3-Button Serial Mouse ..... 5
Z-Nix 2 Button Mouse ..... 8
Genius LC 2 Button Mouse ..... 8
Mouse Pad ..... 1.50
Microsoft Mouse ..... 29
Trackball ..... 19
Wrist Pad ..... 2.99
1995 Calendar Mouse Pad ..... 2.99

### CD ROM

Sony 55A ..... $119
Panasonic ..... 119
Mitsumi ..... 119
TEAC 4x ..... 225
Toshiba 4x ..... 289

### CD ORGANIZERS

CD Jewel Case 1/10 ..... 99¢/7.50
CD Flip File 12/60 ..... 3.50/9.99
12 CD Rack Organizer ..... 5.99
12/24 CD Profile Black Case ..... 5.99/10.99
36 CD Rack w/Door Black ..... 8.99
60 CD Rack Black ..... 9.99
60 CD Rack w/Door Black ..... 15.99
60/120 CD Tower Black ..... 11.99/19.99
96 CD Media Rack ..... 15.99
3 1/2" Disk Box 10pc. ..... 1.50
3 1/2" Disk Box 50pc. ..... 4.99
3 1/2" Disk Box 100pc. ..... 6.99
5 1/4" Disk Box 10pc. ..... 1.50
5 1/4" Disk Box 50pc. ..... 4.99
5 1/4" Disk Box 100pc. ..... 6.99

### SCANNERS

Genius Black & White/Gray Scale ..... $79/109
Genius Color/Flatbed ..... 239/579

### AUDIO

Computer Speaker System (Pair) ..... $5
Amplified Speakers (Pair) ..... 15
Amplified Speakers (Pair) 80 Watt/112Watt ..... 49/59
Microphone ..... 5
Joystick ..... 13
Game Pad/Cordless ..... 10/19
Scanner Tray ..... 29
Printer Stand ..... 2.99
Mouse Holder ..... 1.99
Monitor Moving Arm ..... 29
Power Center ..... 15
Power Strip ..... 3.99
Copy Holder ..... 5.00
Mounting Frame ..... 5.00
Computer Vacuum Cleaner ..... 9.00
Computer Stand ..... 2.99
Complete Computer Cover ..... 9.00
14" Monitor Cover ..... 3.99
Case Cover (Mini, Medium, Full Tower) ..... 3.99
Keyboard Cover ..... 3.99
Printer Cover ..... 3.99
Winfax Lite Software ..... 9.00
Keyboard Drawers Under/Top ..... 15/19
Lan Card (Jumperless Network Card) ..... 35
Conner 250 Tape Backup ..... 149
TV to VGA Encoder ..... 99
Hi-Tuner (Delivers TV Signals to Your PC) ..... 89
Easy Painter ..... 99
Hi-Video (Motion Picture Manipulation) MPEG Card (Movie) ..... 225

# Product Spotlight

## UPDATES

**Apple Computer** has made available **v1.2 of the Apple Media Kit**. The new version supports QuickTime 2.0 and creates Power Macintosh run-time applications. It is available to registered users of v1.0 for $49, and a demo CD of the Apple Media Kit is $10. Apple Computer, Inc., 20525 Mariani Ave., Cupertino, CA 95014. 1-800-282-2732.

**Ashlar** has shipped **Velum for Windows v2.7**, the latest version of it's 2-D and 3-D design and drafting software for mechanical engineers, industrial designers, and other precision-oriented designers. The 2-D version has an SRP of $2495 and $2995 for the 3-D version. Ashlar Incorporated, 1290 Oakmead Pkwy., Suite 218, Sunnyvale, CA 94086. (408)746-1800.

**Caere Corp.** is shipping its newest optical character recognition product for the Macintosh, **OmniPage Direct 2.0**. It uses the latest in neural network design and linguistic capabilities. List price is $99. Caere Corp., 100 Cooper Ct., Los Gatos, CA 95030. (408)395-7000.

**Knowledge Revolution** is releasing **Working Model 2.0**, the new version of its kinematic/dynamic simulation software for building and anayizing complex mechanical systems on the PC. Priced under $1500. Knowledge Revolution, 66 Bovet Rd., Suite 200, San Mateo, CA 94402. (415)574-7777.

**Miramar** released **Personal MACLAN Connect 5.0**, which now allows full peer-to-peer file and print sharing between Windows-based PCs and the Macintosh. Miramar Systems, 121 Gray Ave., Suite 200-B, Santa Barbara, CA 93101. (805)966-2432.

**Norman Data Defense Systems** has released **Armour v3.45**, its modular system of virus protection that utilizes the paradigm of Smart Behavior Blocking to prevent virus infection. Norman Data Defense Systems, Inc., 3028 Javier Rd., Suite 201, Fairfax, VA 22031. (703)573-8802.

**OSC** is shipping **DECK II v2.2**, a Power Mac-compatible version of its digital audio tool that makes digital media creation accessible to a much broader audience. OSC, 480 Potrero Ave., San Francisco, CA 94110. (415)252-0367.

**Pixar** released **Pixar Classic Textures Vol. 2**, its second library of photographic textures available on CD. This collection features clouds, marbles, papers, metals, flowers, and waters among others. The price is $169. Pixar, 1001 W. Cutting, Richmond, CA 94804. (510)236-4000.

**Softkey** has released **BodyWorks 3.0**, the new version of its interactive multimedia anatomy and physiology software. List price is $69.95. Softkey International, P.O. Box 629000, El Dorado Hills, CA 95762-9983. 1-800-242-5588.

**Spalding Software** announced **DataImport 4.0**, a Windows version of its popular data translation utility. This version adds new productivity features like on-the-fly multiline unstacking and seven new output formats. The price is $189 and $495 for a five-user LAN. Spalding Software, Inc., 154 Technology Pkwy., Suite 250, Norcross, GA 30092-2911. (404)449-1634.

**Synergy** announced **v4 of its Modem Assist PLUS** nondedicated modem sharing software. The new version contains a number of enhancements for Windows users. Priced at $899 per network file server or domain with unlimited users and modems; four-port and two-port versions are also available. Synergy Solutions, Inc., 2150 S. Country Club Dr., Suite 1, Mesa, AZ 85210. (602)545-9797.

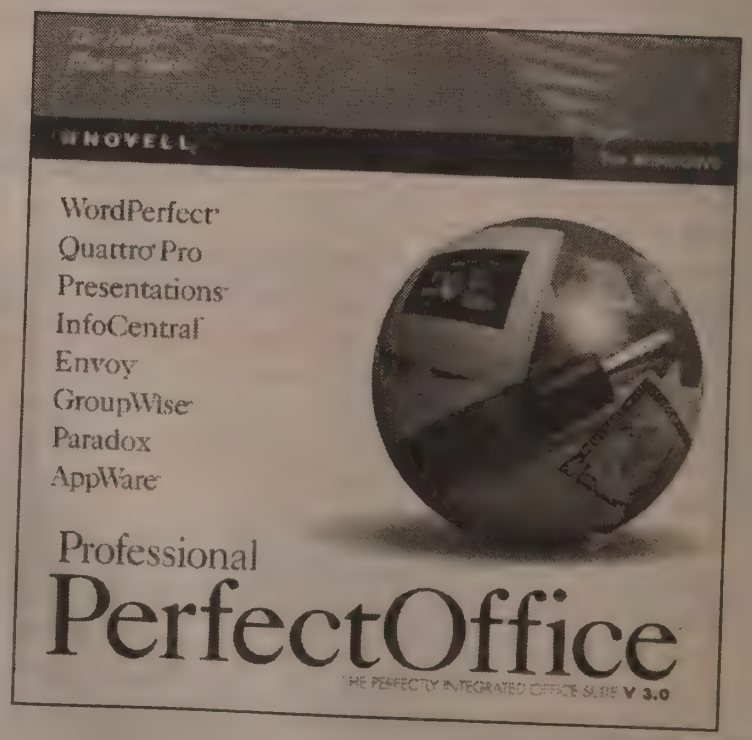
**VERSANT ODBMS** object database management system for multiuser distributed applications is now **available for OS/2 2.1**. Versant Object Technology Corp., 1380 Willow Rd., Menlo Park, CA 94025. (415)329-7500.

# New Products

## PC Software

### Novell PerfectOffice 3.0

PerfectOffice 3.0, Novell's first desktop applications suite, combines WordPerfect 6.1 (word processor), Quattro Pro 6.0 (spreadsheet), Presentations 3.0 (presentation graphics), InfoCentral 1.1 (personal information manager), Envoy 1.0 (workgroup publishing tools), and a GroupWise 4.1 client license (integrated email, calendaring, and scheduling) in one package. The Professional version includes all of these as well as Borland's Paradox 5.0, a relational database, and Novell AppWare, a fifth-generation visual custom development tool. PerfectOffice offers program integration using PerfectFit technology, task automation with a cross-application scripting language, and network benefits for both end-users and IS managers. In addition, the workgroup publishing tools allow for collaborative computing acrooss networks. (Standard version, $659; Professional version, $859; special introductory upgrade prices of $199 for users of any Novell application and $239 for users of competitive products until March 31, 1995) Novell Applications Group, 1555 N. Technology Way, Orem, UT 84057-2399. 1-800-451-5151.



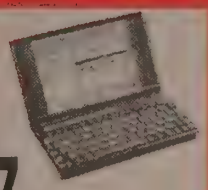



*continued on page 168*

# MORE COMPUTER BUYS - FROM FRY'S!

HEWLETT PACKARD
*Authorized Dealer*

## OmniBook 600C
## 486DX-50MHz
### SUPER PORTABLE COLOR PC



- 486SDX-50MHz CPU
- 4MB RAM
- 170MB Hard Drive
- VLB
- 1MB VRAM
- 2 PCMCIA Type II Slots
- MS-DOS
- Color Display
- MS Windows
- Laplink Remote Access

**$2695**

#1976504

## TOSHIBA T1910
## 486SX-33MHz
## 200MB NOTEBOOK

- 486SX-33MHz
- Serial/Parallel Port
- 1.44MB Floppy
- 4MB RAM
- 200MB Hard Disk
- 9.5" LCD Screen
- 6.5 lbs

**$1299**

#1901379

*AMBRA*
## 486DX4-100MHz
### ACTIVE MATRIX COLOR NOTEBOOK

- 486DX4-100MHz
- 4MB RAM
- 1.44 Floppy Drive
- 450MB Hard Drive
- 9.5" Active Color Matrix Screen
- PCMCIA
- Built-In Trackball
- One Year Warranty
- Remanufactured to original factory specifications

**$2799**

#1979378

*Avanti*
## 486DX2-66MHz
### 200MB COLOR NOTEBOOK

- 486DX2-66MHz
- 4MB RAM
- 200MB Hard Drive
- 3.5" 1.44MB Floppy Drive
- MS DOS
- MS Windows
- PCMCIA II
- Trackball

**$1995**

#1914870

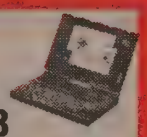
COMPAQ
## 486DX2-40MHz
### CONTURA 400CX
### 250MB ACTIVE COLOR NOTEBOOK

- 486DX2 40MHz CPU
- 250MB Hard Drive
- 4MB RAM
- 3.5" 1.44MB Floppy Drive
- Active Matrix Color
- PCMCIA
- Trackball

**$2699**

#1962747

SHARP
## 486DX2-50MHz
### MULTIMEDIA 250MB
### ACTIVE MATRIX NOTEBOOK



- 486DX2-50MHz CPU
- 250MB Hard Drive
- 4MB RAM
- 1.44 Floppy Disk Drive
- 16-Bit Sound
- Microphone
- Glide Pen

PC-8700
#1972108

**$2999**

NEC S/33D
## 486SX-33MHz
### DUAL SCAN COLOR NOTEBOOK

- 210MB Hard Drive
- External Floppy Drive
- PCMCIA II
- MS DOS
- MS Windows™

**$1495**

#1979932

TOSHIBA T1960CS
## 486DX2-50MHz
### DUAL SCAN COLOR NOTEBOOK

- 486DX2-50MHz
- 200MB Hard Drive
- 3.5" 1.44MB Floppy Disk Drive
- PCMCIA
- Dual Scan Passive Matrix Color Screen

**$2297**

#1929498

## HIGH SPEED I/O IDE CONTROLLER

16550 Serial w/ 2.88MB FDD w/IDE Interface
Hi-Speed16550 Serial
Hi-Speed EPP/ECP Parallel
IDE Interface up to 2 88MB
Floppy Controller Game Port

SIIG

**$59.95**

#1884423

## Canon BJ-10SX NOTEBOOK PRINTER

360 dpi • 110 cps • 3.7lbs
30% Faster than BJ-10EX.
Remanufactured to factory specifications.

**$158**

#1951259

## PCMCIA 9600/2400B FAX/MODEM

PCMCIA Type II Fax/Modem

**$39.95**

#1979380

*Newcom*
## PCMCIA 14,400 FAX/MODEM

**$139**

#1981550

## LINKSYS PCMCIA COMBO

Supports10 Base 2 and 10 Base T and BNC COAX • 16K Buffer
128KB Flash Buffer

**$189.95**

#1936476

*HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®*

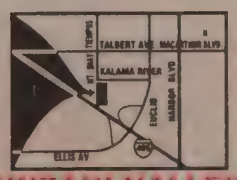
ELECTRONICS
Fry's

*Prices Good Through March 28, 1995*

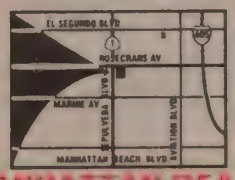
*Limit Rights Reserved. Not Responsible for Typographical Errors.*

**STORE HOURS**
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers




**FOUNTAIN VALLEY**
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444




**MANHATTAN BEACH**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3797

DISCOVER NOVUS
VISA
MasterCard

# 486DX2/66MHz VESA LOCAL BUS MOTHERBOARD

- VLB 486 Motherboard
- 0K Cache expandable to 256K
- 0K RAM
- CPU Sold Seperately

**$59.95**

#1936432

# DEEP GREEN 486DX2-66MHz VESA LOCAL BUS MOTHERBOARD

- 486DX2-66MHz VLB
- Deep Green Motherboard
- Power Manager
- Zif Socket
- 72-pin SIMM Socket
- OK Cache expandable to 286K Cache

**$89.95**

#1967362

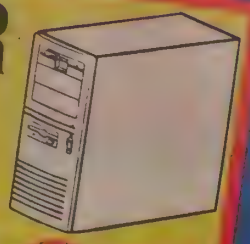
# 486DX4-75/100MHz VESA LOCAL BUS MOTHERBOARD

- VLB 486DX4 Motherboard
- 256K Cache
- Uses 486DX 4/75MHz or 486DX-4/100Mhz
- CPU Sold Seperately

**$139**

#1928073

# MINI TOWER COMPUTER CASE WITH POWER SUPPLY



**$33.99**

#1742428

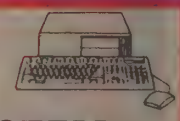
# PENTIUM 60MHz 8MB/420MB PCI SYSTEM

Mitac Pentium 60MHz • 8MB RAM
420 MB Hard Drive • 1.44MB Floppy Drive
PCI 1MB SVGA • 104-Key Keyboard
2 Serial/1 Parallel/1 Game Port
Mouse • MS DOS 6.22 • MS Windows™ 3.1 • Mini Tower Case
**Monitor Sold Separately**

**$1399**

#1950845

# Canon 486DX2-66MHz 8/420MB MULTIMEDIA SYSTEM



- 8MB RAM
- 420MB Hard Drive
- CD-ROM
- Sound Card
- Speakers

**Monitor Sold Separately!**
**Limited to Supply on Hand!**

**$1499**

#1991608

# Canon PENTIUM 90MHz 1 GIGABYTE MULTIMEDIA SYSTEM

- Pentium 90MHz CPU/Motherboard
- 8MB RAM
- 1 Gigabyte Hard Drive
- 14,400 bps Fax/Modem
- Double-Speed CD-ROM
- Sound Card
- Speakers
- MS DOS
- MS Windows™
- Many CD Titles

**Monitor Sold Separately!**

**$2599**

#1968189

# LeadingEDGE 486DX2-66MHz 420MB SYSTEM

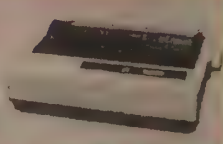
- 486DX2-66MHz Slimline Desktop
- 4MB RAM
- 420MB Hard Drive
- 1.44MB Floppy Drive
- Mouse
- DOS
- Windows™

**Monitor Not Included**

**$895**

#1962769

# Panasonic KX-P1150 DOT MATRIX PRINTER



- 240cps draft print speed
- 4K buffer capacity frees up the computer
- Windows 3.1 driver included
- 2 year limited warranty
- 7 Resident fonts

**$139**

#1839283

# brother 6 PAGES PER MINUTE LASER PRINTER

Get the Straight Paper Path Advantage!
Features Include
- 6 ppm laser printer- 50% faster than 4 ppm engines
- Reduces annoying jams and curls
- Prints envelopes reliably
- Prints on different paper stocks and sizes

HL-630
#1943111

**$397**

Charlie Chip Says:
"Your Best Computer Buys are Always at...

# Fry's ELECTRONICS

## STORAGE CORNER

MEMOREX COMPUTER SUPPLIES

**3.5" DS/HD IBM FORMATTED DISKETTES**

10 PACK

$4.99*

*After $2 Mail-In Rebate In-Store Price $6.99

#1904268

**maxell 8MM DATA CARTRIDGE 2.5 GIGABYTE HELICAL SCAN**

$9.99

HS-8/112
#1527230

**1024 X 768 14" SUPER VGA MONITOR**

- 1024 X 768
- 39 Dot Pitch
- Interlaced

$177

#1983238

**SVGA 16-BIT 1024x768 CARD**

- Super VGA
- 1024x768
- 256K expandable to 512K RAM

$29.99

#1611564

**Non-Interlaced 14" SUPER VGA MONITOR**

- 1024 X 768
- 28mm dot pitch
- Non-interlaced
- One Year Warranty

$199

#1657506

Parana

**752 INK REFILL BLACK TWIN PACK**

for HP 51626A cartridge HP DeskJet and DeskWriter series

$14.99

#1889015

**Trackball Mouse 2-in-1 Combination**

- TrackBall and Mouse
- Microsoft and PC compatible
- Ergonomic design
- 50-2400 dpi Dynamic Resolution
- Mouse driver software and Menu Maker Software
- Free Mouse Trax mouse pad

$16.99

#1976331 SHG Inc.

**COMPUTER TABLE WITH HUTCH**

- 42"w 38.5"h 23.75"d
- Top has 2mm edgebanding with a radius edge.
- Full width pull-out keyboard/mouse shelf.
- Off set modesty panel for paper/cable pass thru
- Paper/binder shelf below table top
- 138 lbs

$139

#1966888

**2-WAY DATA SWITCH BOX**

- High quality rotary switch, no power required.
- Female connectors with gold plated contacts.
- Fully shielded metal case with anti-skid feet

$2.99

#1950764

Labtec

**MULTIMEDIA COMPUTER SPEAKERS**

3.6 Watts x 2 Output Power
High efficiency micro stereo speakers
Built-In power booster (4, c" size batteries not included) Individual volume controls • DC 6 volt input jack 3.5mm stereo plug

$4.77

SS11
#1931013

**Dexxa Joystick**

Advanced features at an affordable price make Dexxa Joystick your best gaming value. Wrap your hand around the ergonomic grip of Joystick and you'll feel the difference.

- The trigger uses technology from professional sports guns for better accuracy and stability
- Additional button for missiles, bombs and other weapons control
- The autofire feature can be set for continuous fire power
- The adjust feature resets the cursor to the center of your screen

$14.99

#1937927

**POWER CENTER WITH FAX MODEM PROTECTION**

- 5-outlet surge protector
- 5 individual controls
- Lighted master on/off switch.

$17.49

#1976456

Mustek

**TWAIN SCAN DUO 600 SCANNER**

This scanner offers true color input, 24 bit per pixel color scans, capturing 16.78 million colors. It is MAC and PC compatible as well as large flat boxed. Photographs, artwork, or text are scanned at a true vertical resolution of 600 dpi and a true horizontal resolution of 300dpi. Duo 600 offers 256 true gray scale scanning for black and white images.

$469

#1949519

**3.5" EXTERNAL SCSI CASE ENCLOSURE FOR SCSI HARD DISK W/POWER SUPPLY**

$59.95

#1930849

SPEEDSTAR PRO

**1024 X 768 24-BIT WINDOWS AND AUTOCAD ACCELERATOR**

- 1024 X 768
- 1MB DRAM

$89.95

#1804083

**Split Style ERGONOMIC KEYBOARD**

- AT Compatible
- Din 5 Connector
- Includes FREE Custom WristPad!

$48.99

#1940250

**MOUSE ARENA**

- Ergonomic design to help reduce wrist fatigue
- Leather cushion
- Metal support for mouse cable
- TyronTM work surface
- Adjusts for left or right-handed users
- Black finish only

$11.99

#1887987

KENSINGTON.

**POWER BACKER PLUS**

300VAUPS protects against surges, brownouts, and blackouts. Protect Your Data!

$79.99

#1976478

TARGUS A TRADITION OF EXCELLENCE

**NOTETOTE**

- Black Carrying Case
- Perfect for Notebooks
- Outside Pocket
- Nylon Case

$18.99

#1901689

**SAGITTA COLOR HAND SCANNER**

Features:

- 100 to 800 dpi resolution
- True RGB color producing 16.8 million color(24 Bit total)
- 256 True gray scale scanning
- 64 gray levels (dithered)
- Unlimited halftone patterns
- Scalable halftone size
- 4.13" scanning width
- Scanner Interface Card

$169

QTRONIX
#1938124

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Fry's ELECTRONICS

Prices Good Through March 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

**STORE HOURS**

MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers

**FOUNTAIN VALLEY**
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

**MANHATTAN BEACH**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS VISA MasterCard ACCEPTED

# Macintosh Systems And Monitors

Authorized Reseller

Authorized Reseller

## Apple® Macintosh® Performa® 475 4/160

68LC040 Processor • 50/25 MHz Speed • 4MB RAM Expandable to 36MB • 160MB Hard Drive • 256 Colors 7 SCSI Built-in • 14" RGB .28mm Non-Interlaced Display AppleTalk® / LocalTalk® • Digital Sound and Internal Speaker • Sound Out Port • Keyboard • Mouse
**Free Software:** System 7.1P with Launcher, ClarisWorks 2, Quicken 4, At Ease, MacLink Translators Pro, Click Art Performa Collection, Macintosh PC Exchange, Apple Special Edition of American On-line, American Heritage Dictionary 3rd Edition, Mario Teaches Typing, Spectre Challenger, Super Munchers.

**$1099**

#1942693

## Apple® Macintosh® Performa® 575 5/250/CD

HOT NEW PRICE

68LC040 @ 33 MHz Processor • 250MB Hard Drive 5MB RAM Expandable to 36MB • 1MB VRAM 14" Integrated Macintosh® Color Display with Trinitron Tube Internal AppleCD 300i Plus CD-ROM Drive • Keyboard • Mouse
**Free Software:** System 7.1P with Launcher, ClarisWorks 2, Quicken 4, At Ease, Click Art Performa Collection, Macintosh PC Exchange, Apple Special Edition of America On-line, American Heritage Dictionary 3rd Edition, Mario Teaches Typing, Spectre Challenger, Super Munchers, Best of Homeworks Templates
**CD-ROM Titles:** Grolier's Encyclopedia • 1993 Time Magazine Almanac
Microsoft® Dinosaurs
Wacky Jack's CD Game Show

**$1499**

#1957738

## Apple® Macintosh® Performa® 630CD 8/250

68LC040 @ 66/33 MHz Processor • 8MB RAM Expandable to 36MB • 250MB Hard Drive 32,768 Colors • 7 SCSI Built-in 14" Apple 28mm Non-Interlaced Display • AppleTalk® / LocalTalk® • Double-Speed Internal CD-ROM • 16 Bit CD Stereo • Internal Stereo Speakers • Headphone Jack
**Free Software:** Mac System 7.1P with Quicktime Player Claris Works 2 • Quicken 4 • At Ease • MacLink Pus Translators Pro • Click Art Performa Collection • MAC PC Exchange • New Grolier Multimedia Encyclopedia on CD • Time Almanac CD 3D Atlas CD • Family Doctor CD • American Heritage Dictionary Kid Works • Thinkin' Things • Writing Center Wacky Jacks CD Game Show • Spectre Challenger • Spin Doctor Challenge Dole Five-A-Day Adventures CD Cross Wizard

**$1899**

#1942729

## Apple® Macintosh® Performa® 6115CD 8/350

HOT NEW PRICE

60MHz PowerPC™ 601 Processor • 8MB RAM Expandable to 72MB 350MB Hard Drive • 15" Apple® Multiple Scan Display w/Built-in Speakers • AppleTalk® / LocalTalk® • Double-Speed Internal CD-ROM Global Village 14,400 BPS Modem
**Free Software:** Mac System 7.5 • Claris Works 2 Quicken 4 • American Heritage Dictionary • Now Up To Date/Contact• Click Art Performa Collection • Mac Gallery Clip Art • Macintosh PC Exchange • MacLink Plus Easy Open Translator • E-World • Grolier s Multimedia Encyclopedia CD Time Almanac CD • 3D Atlas CD • Family Doctor CD • Around the World in 80 Days • Kidsoft • Spectre Challenger • Spin Doctor Challenge

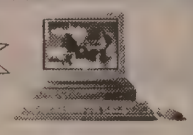
**$2399**

#1966682

# PowerPC™ SYSTEMS

## PowerPC™ Apple® Power Macintosh™ 6100/66/CD 8MB/350HD

NEW



PowerPC 601 RISC at 66 MHZ • 256K level 2 cache, integrated FPU 8MB RAM expandable to 72MB 350 Hard Drive • Double-Speed internal CD-ROM • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port, 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks
**Monitor and Keyboard not included**
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

**$1899**

#1988381

## PowerPC™ Apple® Power Macintosh™ 7100/80 8MB/500HD

NEW

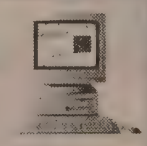
PowerPC 601 RISC at 80 MHZ • 256K level 2 cache, integrated FPU 8MB RAM expandable to 136MB 500 Hard Drive • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port, 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks
**Monitor and Keyboard not included**
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

**$2729**

#1988392

## PowerPC™ Apple® Power Macintosh™ 7100/80/CD 8MB/700HD

NEW



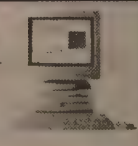
PowerPC 601 RISC at 80 MHZ • 256K level 2 cache, integrated FPU 8MB RAM expandable to 136MB • 700 Hard Drive • Double-Speed internal CD-ROM • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port, 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks
**Monitor and Keyboard not included**
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

**$3099**

#1988406

## PowerPC™ Apple® Power Macintosh™ 7100/80/CD/AV 16MB/700HD

NEW



PowerPC 601 RISC at 80 MHZ • 256K level 2 cache, integrated FPU 2MB VRAM Video input/output 700 Hard Drive • Double-Speed internal CD-ROM • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port • 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks
**Monitor and Keyboard not included**
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

**$3599**

#1988417

## MAGNAVOX 640 x 480 14" MAC COLOR MONITOR

28 Dot Pitch
640 x 480
Includes Cable
CM2080

**$259**

#1748516

## Apple® Multiple Scan 15" Display

The Apple® Multiple Scan 15 Display is a high-quality monitor. It features
- The state-of-the-art Flat Square Screen and stereo speakers
- Antiglare surface treatment with a flicker-free refresh rate to minimize eyestrain
- 640 by 480pixels to1,024 by 768 pixels
- It includes stereo speakers and a headphone jack.

**$477**

#1956771

## Apple® 17" Color Multiple Scan Display

- Multiple-scan technology allows you to adjust resolution
- 17-inch screen Sony Trinitron tube
- Comes with a tilt-and-swivel base that allows you to position the monitor for optimal viewing comfort
- Complies with the EPA's EnergyStar conservation guidelines
- Adjustable resolution through software (included): Selectable from 640 by 480 pixels to 1024 by 768 pixels

**$989**

#1925508

## Apple® 20" Color Multiple Scan Display

- Multiple-scan technology allows you to adjust resolution
- 20-inch screen Sony Trinitron tube
- Comes with a tilt-and-swivel base that allows you to position the monitor for optimal viewing comfort
- Complies with the EPA's EnergyStar conservation guidelines
- Adjustable resolution through software (included): Selectable from 640 by 480 pixels to 1152 by 870 pixels

**$1989**

#1897131

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

FRY'S ELECTRONICS

Prices Good Through March 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

**STORE HOURS**
MONDAY-FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
Discover, VISA and MasterCard Accepted

Authorized Reseller

# Macintosh Accessories and Software

Authorized Reseller

## TELEPORT
### Teleport Gold II 14.4 Fax Modem for Macintosh®

Includes award winning Global Fax Software.

**$129**

#1979024

## GRAVIS
### JOY STICK FOR MACINTOSH®

- Arcade Style game controller
- Digital to Analog Technology
- Left or Right handed operation
- 1 year warranty

**$44.99**

#1440168

## CONNECTIX QUICKCAM
### Digital Video Camera for Macintosh®

- CCD-based digital video camera with microphone
- Resolution up to 320x240 pixels
- QuickTime movie recorder and editor
- Still picture capture utility
- After Dark™ compatible video screen saver module
- Desktop photo gallery application
- Camera Stand

**$99.99**

#1990227

### MULTIMEDIA CD-ROM KIT FOR MACINTOSH®

- Double-Speed NEC CD-ROM Drive
- Kodak Photo CD Compatible
- Grolier Multimedia Encyclopedia
- Speakers

**$239**

#1886171

## SupraFAXModem
### FAX MODEM 28.8 V.34 FOR MACINTOSH®

28,800 bps data/14,400 bps FAX
Easily upgradable
Includes: Caller ID
Top-rated data/fax software
Silent Answer™ fax & voice line sharing
Five-year limited warranty

**$239**

#1982536

## KENSINGTON.
### MAC TURBO MOUSE TRACKBALL

ADB Trackball for all Macintosh® Computers with an ADB port.

**$99**

#1711392

### Apple® StyleWriter® II Printer

The Apple® StyleWriter® II printer, laser-quality printing at an affordable price.

- 360 dots per inch quality
- Multipurpose tray holds up to 100 sheets of paper and 15 envelopes
- Comes with 39 scalable TrueType™ fonts
- Greyshare™ driver software for gray-scale printing
- All Macintosh® products are designed to work together

**$267**

#1758221

### Stylewriter 2400 Color Ink Jet Printer

- 360 dpi resolution
- 64 scalable TrueType fonts
- Compact printer that produces vibrant colors and crisp text

**$479**

#1966671

## SYMANTEC.
### NORTON UTILITIES 3.1 For Macintosh®

The Norton Utilities is the most powerful collection of tools ever developed for protecting and recovering your data. It proactively prevents trouble by alerting you when problems arise. It recovers data when disaster strikes. It even rescues data from totally trashed disks.

**$109.95**

MAC
#1955644

## MAXIS
### SimTower

SimTower is a simulation of the happenings inside a towering skyscraper. As owner and landlord of the building, your objective is to construct and develop a balanced and profitable piece of commercial real estate by leasing out space inside your tower for apartments, offices, restaurants, shops, and entertaiNent centers.

**$34.95**

MAC
#1973877

### Ventana Press Internet Membership Kit

contains everything you need to put a sleek graphical interface on the information highway and start cruising. FREE ACCESS OFFER: One month plus 6 hours free from CERFnet

**$44.95**

MAC
#1930986

### VEGAS GAMES FOR MAC

Vegas games entertainment package for Macintosh brings the Multi-player aspect of true casino games to your computer wherever and whenever you want. It comes with five complete games:

- Craps
- Poker
- Baccarat
- Blackjack
- Horse Racing

**$19.95**

MAC
#1902004

## Broderbund
### LITTLE MONSTER AT SCHOOL

Little Monster at School is based on the best-selling book by Mercer Mayer. It helps children to learn the alphabet, numbers, science and other subjects. It is fun learning for children ages 3-8

**$39.95**

MAC
CD-ROM
#1933554

## Broderbund
### MYST CD-ROM FOR MAC

Myst is an adventure game unlike any other, with stunning 3-D photo realistic worlds. Myst is a surrealistic exploration, where every vibrant rock, scrap of paper and sound may hold vital clues to your unraveling a chilling tale of intrigue and deceit.
Mouse, hard disk, System 7.01 or higher and a CD-ROM drive required

**$49.95**

MAC
CD-ROM
#1838260

### Rebel Assault CD-ROM for MACINTOSH®

The best CD-ROM game is now available for the Macintosh. Features Include:

- Astonishing 3-D Graphics
- Over a dozen action-packed levels
- Full screen video from the Star Wars movies
- Digitized Speech and movie sound effects.

**$49.95**

MAC CD-ROM
#1923964

## Interplay
### Alone in the Dark

Features Include:

- Intense 3-D polygon graphics bring horror to a new dimension immersing you totally in the game playing experience
- Up to nine different camera angles in each room enhance the cinematic feel so you'll think that you're playing a movie
- Digitized sound effects and music bring this haunted house to life

**$38.95**

MAC
#1973730

### Microsoft® ARCADE 1.0 for Macintosh®

Brings you fast-action play of five classic arcade games - right on your Mac! Take a few minutes out of a busy day to defend your turf and rid the universe of evil intruders.MAC

**$27.95**

MAC
#1958544

## Intuit
### QuickBooks For Macintosh®

The Fastest and Easiest Way to Manage Your Entire Business!

- Speeds bill paying and invoicing
- Complete accounts receivable and payable
- Tracks checking accounts
- Easy inventory and purchase orders
- Complete payroll

**$129.95**

MAC
#1985894

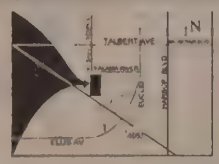
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

# Fry's ELECTRONICS

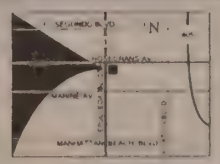
Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors

**STORE HOURS**
**MONDAY - FRIDAY**
**8AM - 9PM**
**SATURDAY**
**9AM - 8PM**
**SUNDAY**
**9AM - 7PM**




***Fountain Valley***
**10800 Kalama River Ave.**
**(714) 378-4400**
**CORP. P.O. FAX (714) 378-4444**




***Manhattan Beach***
**3600 Sepulveda Blvd.**
**(310) 364-FRYS (3797)**
**CORP. P.O. FAX (310) 364-3700**

DISCOVER NOVUS
VISA
MasterCard

**Discover, VISA and MasterCard Accepted**

Authorized Reseller

# Apple® Powerbook® and Software

Authorized Reseller

## Apple® PowerBook® 150 4/120

The Apple® PowerBook® 150 is the most affordable PowerBook® computer, combining the performance of 33-MHz Motorola 68030 microprocessor with the convenience of a compact, lightweight notebook system
- 9.5" diagonal, backlit passive matrix, grayscale display
- 120MB Hard Drive • 5.5 lbs
- Bundled Software: ClarisWorks 2.1
- PowerBook® Mobility Bundle Software

HOT NEW PRICE

FREE Carrrying Case. See Stores For Details.

**$1369**

#1939538

## Apple® PowerBook® 520 4/160

HOT NEW PRICE

68LCO40 Processor • 50/25 MHz Speed
4MB RAM, expandable to 36MB,4MB on board and one memory expansion slot • Internal Apple SuperDrive® Floppy Disk Drive, Internal 160MB Hard Disk Drive • Three expansion slots- One for a processor-direct card, One for an internal modem, and One for RAM • Serial port • ABD™ port • Video-output port • Power adapter port • Sound-input (mono) port and integrated microphone • Sound output (stereo) port and speakers • SCSI port.

FREE Carrrying Case. See Stores For Details.

**$1869**

#1916492

## Apple® PowerBook® 520c Color 4/160

HOT NEW PRICE

68LCO40 Processor • 50/25 MHz Speed • Passive Matrix Color Display • 4MB RAM, expandable to 36MB • Internal Apple SuperDrive® Floppy Disk Drive, Internal 160MB Hard Disk Drive Three expansion slots- One for a processordirect card, One for an internal modem, and One for RAM • Serial port ABD™ port Video-output port • Power adapter port Sound-input (mono) port and integrated microphone Sound output (stereo) port and speakers SCSI port.

FREE Carrrying Case. See Stores For Details.

**$2399**

#1916517

## Apple® PowerBook® 540c Color 12/320/M

HOT NEW PRICE

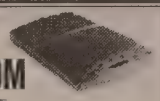
68LCO40 Processor 66/33 MHz Speed • 12MB RAM Apple SuperDrive® • Floppy Disk Drive • 320MB Hard Drive • **Internal Modem** • Three expansion slots- one for a processor-direct card, one for an internal modem, and one for RAM • Serial port ADB™ port • Video-output port Power adapter port Sound-input (mono) port and integrated microphone Sound output (stereo) port and speakers • SCSI port.

FREE Carrrying Case. See Stores For Details.

**$4379**

#1916469

## RENO PORTABLE EXTERNAL CD-ROM FOR MACINTOSH®



Features:
- SCSI-2, Double Speed, 180ms Portable CD-ROM Player
- Portable: Works with AC Adapter or Batteries
- Photo CD Multi-session Ready
- Includes Stereo Headphones, Carrying Case, ACAdapter, and Cables
- Includes Apple SCSI PowerBook Adapter
- Includes FWB CD-ROM Toolkit

MEDIA VISION

**$297**

MV-450
#1988071

## GLOBAL VILLAGE 19.2 FAX/MODEM FOR APPLE® POWERBOOK 500

**$329**

#1938179

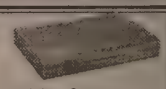
## Apple® PCMCIA Adapter

Works on all 500 series PowerBooks®

**$249**

#1982318

## Apple® Portable StyleWriter® Printer



The Apple® Portable StyleWriter® printer goes anywhere and everywhere with Apple Macintosh® and PowerBook® computers. It delivers high-resolution output, and versatile paper handling, all with smooth, quiet performance. And it even fits inside a briefcase. The Portable StyleWriter® weighs only 4.5 pounds, and works with any PowerBook®, Apple PowerBook Duo®, or Macintosh® computer, using a rechargeable battery or a standard power source. It can print in a horizontal or vertical position, so you can use it in even the most confined spaces, whether you need to print on letterhead, envelopes, labels, or transparencies.

**$389**

#1820443

COREL

## Corel Draw Gallery V1.0

Corel Draw Gallery will add flair to your word processing and presentations with over 10,000 clipart images. It includes Corel Professional photo sampler.

**$35.95**

MAC
#1923517

Softkey

## KEY CAD COMPLETE

Key CAD Complete is the next generation that puts high performance CAD at your fingertips. You can produce drawings, plans and layouts to perfect scale and accuracy. But that's only the beginning, with Key CAD Complete, the only limit is your imagination.

**$24.95**

MAC
#1962965

## MICROSOFT® WORKS 4.0 FOR MACINTOSH®

Gives you the right tools for your home, school, or business needs- word processing, financial analysis, database management, charting, and illustration, plus a new calendar to help you keep track of appointments.

**$99.95**

MAC
#1920488

Intuit

## QUICKEN 5.0 for Macintosh®

The best-selling financial software just got better. Quick and easy in organizing your finances, loans, investments, budgeting and planning.

**$39.95**

MAC
#1955921

CLARIS

## CLARIS ORGANIZER FOR MACINTOSH®

Claris Organizer gives you three things you've been searching for in a Personal Information Manager
- Easy to use program of tasks, calendar, contacts and notes.
- Automatic linking of calendar, to do list, phone numbers and addresses.
- New low introductory price.

**$69.95**

MAC
#1954104

Broderbund

## PRINT SHOP DELUXE FOR MACINTOSH®

Print Shop designs and prints cards, stationery, flyers, calendars and banners.

**$49.95**

MAC
#1850062

BERKELEY SYSTEMS

## After Dark 3.0 for Macintosh®

The best in screen saver software, just got better with
- Over 30 displays, 15 of them are new.
- Ecologic power manager
- Multi-module
- Password protection
- Power Mac compatible

**$29.95**

MAC
#1933392

meca®

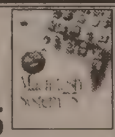
## Managing your Money

is simply the best way to take control of your financial life./ It makes bill paying fast and easy... manages any investment... helps you survive the newly-complicated tax laws... and gives you every financial management tool you need to get serious about taking control of your money.

**$39.95**

MAC 6.0
#1974661

## Apple® Macintosh® System 7.5



New System 7.5 boosts your productivity and enables you to collaborate with others more effectively. It speeds up repetitive tasks, lets you swap files with PCs and allows you to open Macintosh, DOS, or Windows documents.

**$99.95**

MAC
#1949885

## Microsoft® Word 6.0 Upgrade for MACINTOSH®

Special upgrade for users of Microsoft Word 5.0/5.1 or earlier.

**$124.95**

MAC
#1951455

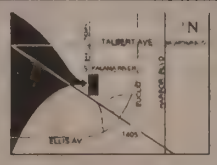
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

FRY'S ELECTRONICS

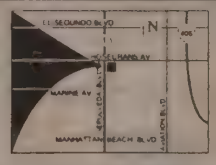
Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

**STORE HOURS**
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM




***Fountain Valley***
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444




***Manhattan Beach***
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard

Discover, VISA and MasterCard Accepted

# EPSON®

WHEN YOU'VE GOT AN EPSON
YOU'VE GOT A LOT OF COMPANY

## EPSON Action Laser™ 1500

- Fast six pages per minute print speed
- HP LaserJet III and Epson dot matrix compatible
- 27 resident fonts, 13 scalable
- 1MB memory expandable to 5MB
- 300 dpi resolution w/RIT
- Built-in parallel & serial interface
- 2-year limited warranty

**$479**

#1798706

## EPSON Action Laser™ 1400

**The Best Value In True 600 dpi Laser printing**

- 600 dpi printing with Edge Smoothing Technology
- PCL 5e Compatible
- 2MB Memory with Image Compression Technology
- Printer Control Panel Software for Windows and DOS
- 45 Scalable Fonts, 10 TrueType Compatible

**$699.99**

#1984930

## EPSON Action Laser™ 1100

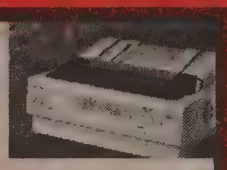
**Advanced laser printing at a personal laser price.**

- 300 dpi printing with Edge Smoothing Technology
- PCL 5e Compatible
- 1MB Memory with Image Compression Technology
- Toner Saving Mode
- Printer Control Panel Software for Windows™ and DOS
- 22 Fonts, 8Scalable

**$397**

#1986389

## EPSON LQ-570+ 24 PIN PRINTER WITH SCALABLE FONTS!

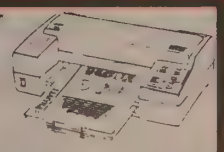


- 80 Column
- 269 CPS Draft Mode
- 112 CPS Letter Quality
- Four Scalable Fonts
- 360 dpi with Optional Film Ribbon

**$248**

#1612004

## EPSON Stylus 800 Plus



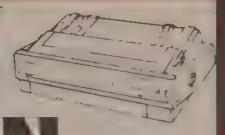
**High Definition Inkjet Printing that Sets the Standard.**

- Exclusive Epson Stylus Technology
- Improved grayscale graphics
- Your choice of fonts
- Windows™ compatible

**$209**

#1950214

## EPSON LQ-1070 PLUS 24-PIN PRINTER



- 136 Column
- 11 Fonts
- 2 Scalable Fonts
- 252 CPS Draft Mode
- 84 CPS NLQ Mode

**$365**

#1821927

# digital PRINTERS

## digital DECwriter 65 COLOR DOT MATRIX PRINTER

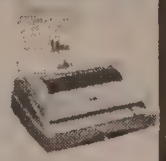
- 24-wire color dot matrix printer
- Printer speed up to to 2.8 pages per minute (260x360 dpi)
- Built-in 50-page sheet feeder
- High quality color for home or office
- Two Year Warranty

**$159.99***

*After $20 Mail-In Rebate
In-Store Price $179.99

#1907342

## digital DECcolorwriter 120c COLOR INKJET PRINTER



- Low-cost color thermal inkjet printer
- Print speed up to 3 pages per minute
- Built-in 70-page sheet feeder
- Laser quality at dot-matrix price
- MS Windows™ driver included
- 2-year warranty

**$299.99**

#1907251

## digital DEC Laser 1152 POSTSCRIPT LEVEL 2 LASER PRINTER

IBM & MAC READY

- 300 X 300 dots per inch
- Printer speed up to to 4 pages per minute
- Paper Types: Cutsheet, labels, transparencies and envelopes
- 2MB memory upgradable to 4MB
- 17 Adobe PostScript fonts, upgradable to 43 fonts
- Serial/Parallel AppleTalk interfaces

**$699**

#1907227

## digital DEClaser 5100 POSTSCRIPT LEVEL 2 LASER PRINTER

IBM & MAC READY

- 600 X 600 dots per inch
- Printer speed up to to 8 pages per minute
- Adobe Level 2 PostScript with 73 Adobe fonts
- 2MB memory upgradable to 66MB
- Serial, Parallel and AppleTalk interfaces
- Built-in 250-page sheet feeder

**$1149**

#1907319

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

ELECTRONICS Fry's

Prices Good Through March 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

**STORE HOURS**

MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers

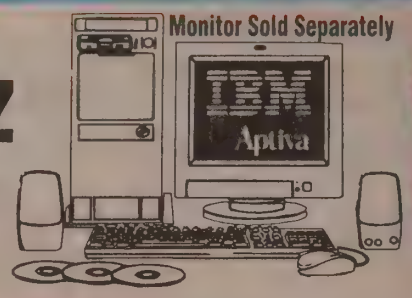
**FOUNTAIN VALLEY**
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

**MANHATTAN BEACH**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

# FRY'S Will Beat Any IBM Price in Town...

## IBM Aptiva 310
# 486SX-33MHz
### 270MB/4MB MULTIMEDIA SYSTEM




Monitor Sold Separately

Intel 486SX-33MHz CPU • 270MB Hard Drive • 4MB RAM expandable to 64MB 3.5" 1.44MB Floppy Drive • Internal Fax/Modem • Local Bus SVGA • Smart Energy System Double Speed CD-ROM • Sound Blaster 16 Sound Card • Speakers
**Preloaded Software:** DOS 6.3 • MS Windows™ 3.11 • Prodigy * Quicken SE Faxworks Reuter's Money Network • Journalist • IBM Club • IBM Connection IBM Housecall • P/S1 Tutorial, Index, • PS/1 Edition American On-line Preloaded Multimedia Software Compton's Encyclopedia • The Discovers Undersea Adventure IBM Photo Display • Recording Session • Introduction to Multimedia Monologue for Windows™ • Sound Card Utilities • MCSMusic Rack Music Mentor
**IBM Quality & Reliability, Support and Service:** The exclusive online PS/1 Club™ answers your computing questions, 24 hours a day, 365 days a year.

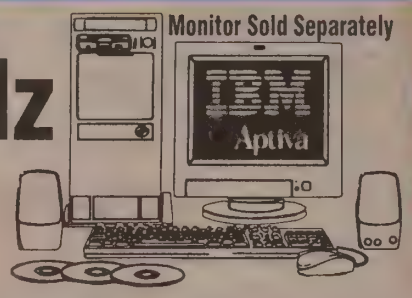
#1949542

IBM®

*IBM and Personal System/1 are registered trademarks of International Business Machines Corporation. The Energy Star Emblem does not represent EPA endorsement of any product or service

**$1099**

## IBM Aptiva 330
# 486SX2-50MHz
### 340MB MINI TOWER SYSTEM




Monitor Sold Separately

Intel 486SX2-50MHz CPU • 340MB Hard Drive • 4MB RAM, expandable to 64MB 1MB VRAM • 3.5" 1.44MB Floppy Drive • Internal Fax/Modem • Local Bus SVGA • Smart Energy System • Double Speed CD-ROM • Sound Blaster 16 Sound Card • Speakers
Preloaded Software: DOS 6.3 • MS Windows™ 3.11 • Prodigy * Quicken SE • Faxworks Reuter's Money Network • Journalist • IBM Club • IBM Connection • IBM Housecall P/S1 Tutorial, Index, • PS/1 Edition American On-line
**Preloaded Multimedia Software:** Compton's Encyclopedia • The Discovers • Undersea Adventure • IBM Photo Display • Recording Session • Introduction to Multimedia • Monologue for Windows™ Sound Card Utilities • MCSMusic Rack • Music Mentor
**IBM Quality & Reliability, Support and Service:** The exclusive online PS/1 Club™ answers your computing questions, 24 hours a day, 365 days a year.

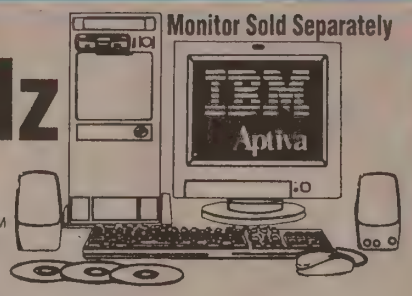
#1949531

IBM®

*IBM and Personal System/1 are registered trademarks of International Business Machines Corporation. The Energy Star Emblem does not represent EPA endorsement of any product or service

**$1299**

## IBM Aptiva 350
# 486DX2-66MHz
### 540MB MINI TOWER SYSTEM




Monitor Sold Separately

Intel 486DX2-66MHz CPU • 540MB Hard Drive • 4MB RAM, expandable to 64MB • 1MB VRAM 8K Cache • 3.5" 1.44MB/5.25" 1.2MB Floppy Drives • Internal Fax/Modem • Local Bus SVGA Smart Energy System • Double Speed CD-ROM • Sound Blaster 16 Sound Card • Speakers
**Preloaded Software:** DOS 6.3 • MS Windows™ 3.11 • PRODIGY * Quicken SE • Faxworks Reuter's Money Network • Journalist • IBM Club • IBM Connection • IBM Housecall • P/S1 Tutorial, Index, • PS/1 Edition American On-line
**Preloaded Multimedia Software:** Compton's Encyclopedia • The Discovers Undersea Adventure • IBM Photo Display • Recording Session • Introduction to Multimedia • Monologue for Windows™ • Sound Card Utilities • MCSMusic Rack • Music Mentor
**IBM Quality & Reliability, Support and Service:** The exclusive online PS/1 Club™ answers your computing questions, 24 hours a day, 365 days a year.

#1949520

IBM®

*IBM and Personal System/1 are registered trademarks of International Business Machines Corporation. The Energy Star Emblem does not represent EPA endorsement of any product or service

**$1695**

# WE GUARANTEE IT!

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

FRY'S ELECTRONICS

Prices Good Through March 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers

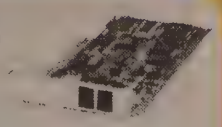
**FOUNTAIN VALLEY**
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

**MANHATTAN BEACH**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

# MODEMS

## 14,400 BPS INTERNAL DATA/FAX MODEM



Data Compression ITU V.42 bis or MNP Class 5
- Error Correction ITU V.42 or MNP Class 2-4
- Saves long distance phone costs through faster transmissions
- Improves worker productivity w/faster data transfer and reliable connections
- Protects your investment with a 5 year warranty, backed by AT&T

#1751420

AT&T Dataport Express

**$99.99**

## 14,400 BPS EXTERNAL DATA/FAX MODEM

Data Compression ITU V.42 bis or MNP Class 5
- Error Correction ITU V.42 or MNP Class 2-4
- Saves long distance phone costs through faster transmissions
- Improves worker productivity w/faster data transfer and reliable connections
- Protects your investment with a 5 year warranty, backed by AT&T

#1751419

AT&T Dataport Express

**$119.99**

## 14,400 BAUD INTERNAL FAX/MODEM

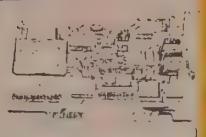
Fax Modem

GROUP 3 Compatible • 16550 UART
BITCOM and BITFAX S/W • Supports up to Com 7 and IRQ-9
5 Year Warranty
#1930078

SIIG, Inc.

**$59.99**

## 2400 BAUD INTERNAL MODEM



MNP 2-5. V 23 BIS, Hayes Compatible for IBM PC
5 Year Warranty
#1966730

**$12.99**

## TheComplete PC Communicator Gold INTERNAL 14,400 BAUD FAX/MODEM w/VOICE MAIL

MNP5 and V 42 bis • Data throughput up to 57,600bps
- Group III Fax w/16550 UART
- 1000 password protected mailboxes

#1906422

**$129.99**

## SUPRA 144I PLUS EXPRESS 14,400 BPS INTERNAL FAX/MODEM

- V.42,V.42bis, MNP 2-5
- 5-year limited warranty
- Fax Talk, COMit,CIM Software
- Includes hardware-based compression and error correction for greater efficiency.

#1964174

Supra Corporation

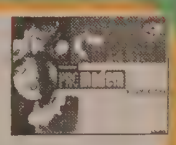
**$79.99**

## 14,400 BPS EXTERNAL FAX/MODEM

V.32 bis, V.42 bis, MNP 2-5 • Windows and DOS Software
800 Toll-Free Technical Support
#1950982

**$74.99**

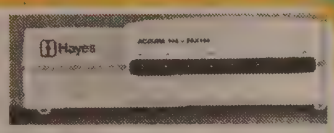
## Prometheus™ 14,400 BPS INTERNAL FAX/MODEM



V.42, V.42 bis
Maxfax Software
5 Year Warranty
#1968558

**$58**

## Hayes® ACCURA EXTERNAL 14,400 BPS FAX/MODEM



- Free SmartCom Data and Fax Software
- Group 3 Fax
- V.42, V.42bis, MNP 2-5
- Cables included

08-01174
#1798201

**$129.99**

## Hayes® ACCURA INTERNAL 14,400 BAUD FAX/MODEM

Free SmartCom Data and Fax Software • Group 3 Fax
V.42, V.42bis, MNP 2-5
Cables included
08-01185
#1798197

**$99.99**

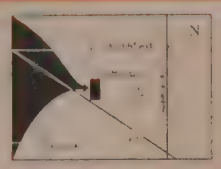
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

ELECTRONICS Fry's

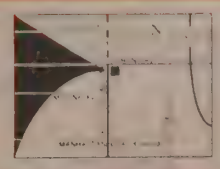
Prices Good Through March 28, 1995

Limit Rights Reserved Not responsible for typographical errors.

STORE HOURS
MONDAY -FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED.

# MODEMS

## PRACTICAL PERIPHERALS FaxMe

**Introducing the plug-in cartridge that turns a HP LaserJet printer into a plain paper receive FAX machine.**
FaxMe turns your HP printer into a receive only fax machine. It is compatible with all Group III fax machines and will receive at 9,600, 4,800, or 2400 BPS. FaxMe runs without software and without a computer.
Lifetime Warranty.
#1741771

**$69**

## Prometheus™ EXTERNAL 14,400 BAUD FAX/MODEM

for Windows and DOS
Includes MaxFax Software from Prometheus
#1843660

**$89.99**

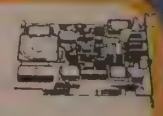
## SHIG, Inc. 28,800 BAUD INTERNAL FAX/MODEM w/V.34 bis

- Class 1 and 2
- Supports up to Com 1-4 and IRQ-3,4,5
- 5 Year Warranty

#1991619

**$159.99**

## PRACTICAL PERIPHERALS 14,400 BAUD INTERNAL FAX/MODEM



14,400 Baud Modem/Fax
Super High Speed V.32 BIS Protocol
Quick Link II communication Software
#1667912

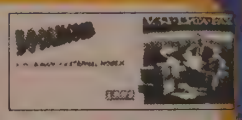
**$98**

## PRACTICAL PERIPHERALS 14,400 BAUD MINI TOWER FAX/MODEM EXTERNAL

V.32 and V.42 Bis
Quick Link II Communication Software
#1757781

**$129.99**

## BOCAMODEM V.34 28,800 bps External Fax/Modem



New International Standard
- 28,800bps Data Modem
- 14,400bps Send/Receive Group 3 Fax
- V.42bis Data Compression for Troughput Up to 115,200bps
- High-Speed 16C550 UART Serial Card Included
- Backward Compatible with V.Fast Class (V.FC) and Lower Speed Modems
- Five Year Warranty

#1981878

**$238**

## BOCAMODEM V.34 28,800 bps Internal Fax/Modem

New International Standard
- 28,800bps Data Modem
- 14,400bps Send/Receive Group 3 Fax
- V.42bis Data Compression for Troughput Up to 115,200bps
- High-Speed 16C550 UART Serial Card on board
- Backward Compatible with V.Fast Class (V.FC) and Lower Speed Modems
- Five Year Warranty

#1981867

**$198**

## BOCA SoundExpression 14.4VSp

***Transform your ordinary PC into a powerful multimedia/communications workstation***
- 16-bit Multimedia Stereo Sound
- Voice Mail
- 14,400bps Send/Receive Fax/Data Modem
- Speakerphone
- Five Year Warranty

#1981889

**$169.99**

## Prometheus™ INTERNAL 14,400 BPS FAX/MODEM VOICE CARD

- 14,400 BPS Fax Modem with Voice Mail
- V.42
- V.42 bis
- 5 Years Warranty

#1968581

**$89.95**

## Telecoupler II

High Speed Modem Coupler

**CONNECTS A PORTABLE COMPUTER TO ANY TELEPHONE EASILY.**
- Accoustic coupling with telephone handset
- Industry standard telephone to modem connector RJ-11
- Full or Half Duplex Communication Mode

#1847790

**$109**

CP+

## 14,400 BPS INTERNAL FAX/MODEM

V.32 bis, V.42 bis, MNP 2-5 • Windows and DOS Software
- 800 Toll-Free Technical Support

#1950971

**$58**

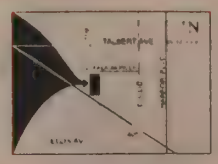
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

FRY'S ELECTRONICS

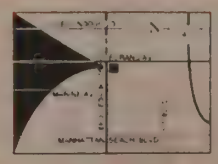
Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors

**STORE HOURS**
MONDAY-FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



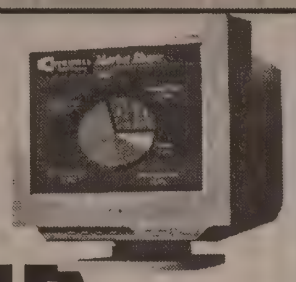
**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard

DISCOVER, VISA AND MASTERCARD ACCEPTED.

# MONITORS

## SONY.
## CPD-15FS
## 1280 x 1024
## 15" SUPER VGA MONITOR



15" 1280 X 1024 Resolution • Flat Trinitron Screen
Energy Star Compliant
#1928095

**$435**

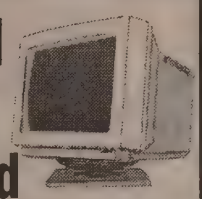
## 15" SUPER VGA MONITOR

**NON-INTERLACED**
**1280 x 1024**
**.28mm DOT PITCH**

#1983744

**$279**

## HITACHI

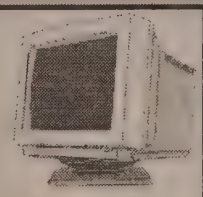


**SuperScan™ 15s**
**Non-Interlaced**
**1280 x 1024**
**15" SUPER VGA MONITOR**

Non-Interlaced • .28dpi • Flat Screen
#1939376

**$395**

## NEC

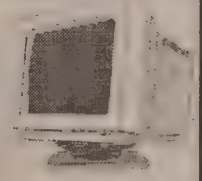


**XP15**
**Multisync**
**FLAT SCREEN**
**15" SUPER VGA MONITOR**

.28 dot Pitch • 1024x768 - 76Hz • Flat OptiClear
Easy Access • MPR-II
#1960963

**$659**

## NEC



**XV15**
**Multisync**
**FLAT SCREEN**
**15" SUPER VGA MONITOR**

1280 x 1024 • EPA Energy Star Compliant
VESA
#1988934

**$439**

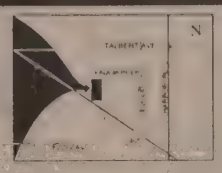
*HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®*

**FRY'S ELECTRONICS**

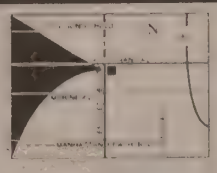
*Prices Good Through March 28, 1995*

*Limit Rights Reserved Not responsible for typographical errors.*

**STORE HOURS**
**MONDAY - FRIDAY**
**8AM-9PM**
**SATURDAY**
**9AM - 8PM**
**SUNDAY**
**9AM - 7PM**



***Fountain Valley***
**10800 Kalama River Ave.**
**(714) 378-4400**
**CORP. P.O. FAX (714) 378-4444**



***Manhattan Beach***
**3600 Sepulveda Blvd.**
**(310) 364-FRYS (3797)**
**CORP. P.O. FAX (310) 364-3700**

DISCOVER
NOVUS
VISA
MasterCard

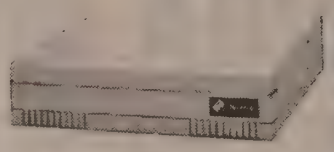
**DISCOVER, VISA AND MASTERCARD ACCEPTED.**

# HARD DRIVES FOR MAC

## 500MB EXTERNAL HARD DRIVE FOR MAC

NEW

MODEL 500
#1993770



NU DESIGN

**$397**

## 730MB EXTERNAL HARD DRIVE FOR MAC

NEW

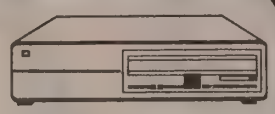
MODEL 730
#1993781

NU DESIGN

**$497**

MITAC

## 270MB Syquest Removable Hard Disk Ideal for Back-ups!

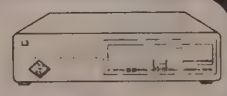


- Cables, terminator, and formation software included
- 3.5", 270MB cartridge included!

#1979013

**$529**

## EXTERNAL SYQUEST 88C FOR MAC



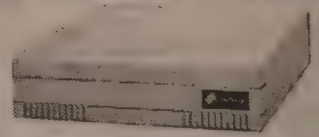
88MB EXTERNAL SYQUEST FOR MAC
Read 44MB Write 88MB Syquest
SYQ88C
#1838721

NU DESIGN

**$399**

## MAGNETO OPTICAL 230MB REWRITABLE FOR MAC

#1992366



NU DESIGN

**$799**

maxell

## 44MB Removable Pre-Formatted Cartridge for Macintosh

100% Syquest Compatible • Five Year Warranty
RC-44 #1997800

**$57**

maxell

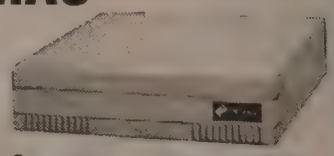
## 88MB Removable Pre-Formatted Cartridge for Macintosh

100% Syquest Compatible • Five Year Warranty
RC-88 #1997811

**$67**

## 340MB EXTERNAL HARD DRIVE FOR MAC

MODEL 340
#1850659



NU DESIGN

**$329**

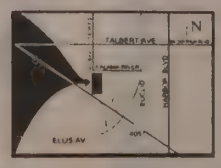
*HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®*

FRY'S ELECTRONICS

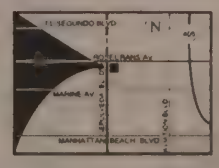
*Prices Good Through March 28, 1995*

*Limit Rights Reserved Not responsible for typographical errors.*

**STORE HOURS**
**MONDAY - FRIDAY**
**8am - 9pm**
**SATURDAY**
**9am - 8pm**
**SUNDAY**
**9am - 7pm**



***Fountain Valley***
**10800 Kalama River Ave.**
**(714) 378-4400**
**CORP. P.O. FAX (714) 378-4444**



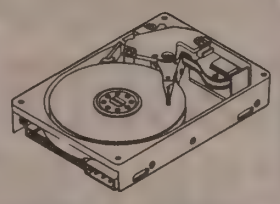
***Manhattan Beach***
**3600 Sepulveda Blvd.**
**(310) 364-FRYS (3797)**
**CORP. P.O. FAX (310) 364-3700**

**MASTERCARD, VISA AND DISCOVER ACCEPTED**

DISCOVER NOVUS
VISA
MasterCard

# SCSI HARD DRIVES

## Quantum™ 540MB SCSI HARD DRIVE



1" ht. • 12ms Access • 300,000MTBF • 2 Year Warranty
128K Cache
Maverick 2M30540MVS
#1899029

**$235**

## CONNER 170MB SCSI HARD DRIVE

3.5" X 1" HT.
14msec
CFA—170S
#1986482

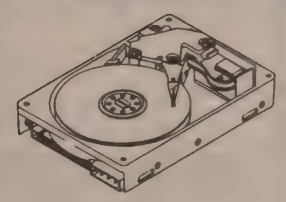
**$99.95**

## Quantum™ 1.08 GIGABYTE SCSI HARD DRIVE

1.08 GB SCSI-3, 9MSEC, 1" HT
5 Years Warranty
Model 1080S
#1899052

**$549**

## CONNER 1.06 GIGABYTE SCSI - II HARD DRIVE



1" SIZE • 9MSEC FAST ACCESS • 256K CACHE
SMALLEST 1 GIGABYTE
#1844890

**$498**

## Quantum™ 2.1 GIGABYTE SCSI-II HARD DRIVE

Empire 2100s
#1928110

**$997**

## Seagate 1.05 GIGABYTE SCSI HARD DRIVE

- 9msec Access Time
- 1/2 ht.
- 256K Cache
- 5 Year Warranty

ST11200N/3120ON
#1836338

**$539**

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

**Fry's ELECTRONICS**

Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

**STORE HOURS**
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

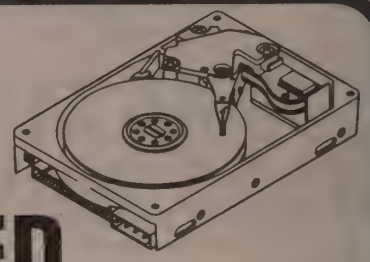
# IDE HARD DRIVES

## 560MB IDE HARD DRIVE

3.5" x 1" ht. 12MSec Access • 256K Buffer
#1949933

**$195**

## Maxtor 850MB ENHANCED IDE HARD DRIVE



3.5" x 1" Ht. • 12 msec Access Time
7850AV
#1988521

**$275**

## Seagate 1.08 GIGABYTE ENHANCED IDE HARD DRIVE

• 12MSEC ACCESS RATE • 3.5" X 1" HT. • FAST ATA • 256K BUFFER
#1990799

**$438**

## WESTERN DIGITAL 850MB ENHANCED IDE HARD DRIVE

Fast Enhanced IDE • 10msec Access • 3.5" x 1" ht.
WD-AC2850
#1988510

**$277**

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

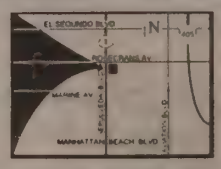
FRY'S ELECTRONICS

Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

**STORE HOURS**
**MON - FRI**
**8am - 9pm**
**SATURDAY**
**9am - 8pm**
**SUNDAY**
**9am - 7pm**

**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



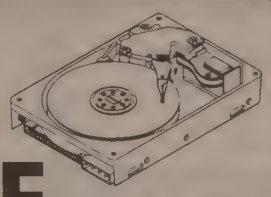
**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

# HARD DRIVES

Maxtor

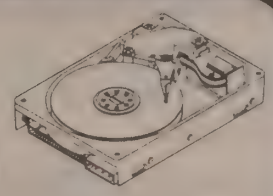
## 420MB IDE HARD DRIVE



3.5" x 1" Ht.
12 msec Access Time
256K Buffer
7420AV #1972979

**$179**

## 420MB IDE HARD DRIVE



3.5" x 1" ht.
#1920787

**$169**

CONNER

## 420MB 3.5" IDE HARD DRIVE

14ms Fast Access • 3.5" X 1" • 32K Buffer
IDE Interface
#1886218

**$179**

IBM

## 728MB ENHANCED IDE HARD DRIVE

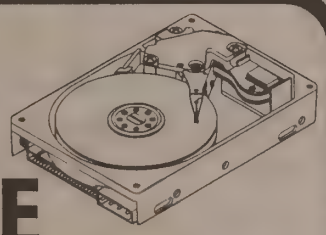
- 12msec Access
- Enhanced IDE
- 3.5" x 1" Ht.

#1983870

**$279**

CONNER

## 540MB IDE HARD DRIVE

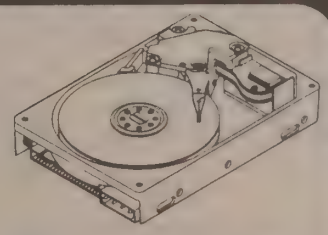


3.5" X 1"HT. • 12msec Access
CFA540A
#1802210

**$215**

CONNER

## 850MB ENHANCED IDE HARD DRIVE



- 1" x 3.5" Size
- 12MSec Access
- 256K Buffer

CFA850A
#1981513

**$299**

HOME OF FAST FRIENDLY COURTEOUS SERVICE!

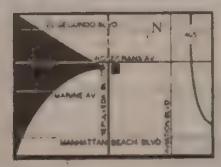
**Fry's ELECTRONICS**

Prices Good Through March 28, 1995

Limit Rights Reserved
Not responsible for typographical errors

**STORE HOURS**
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

***Fountain Valley***
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



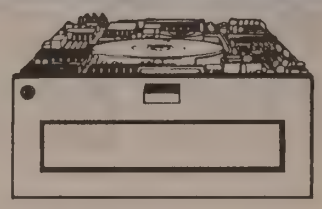

***Manhattan Beach***
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER
VISA

# YOUR BEST STORAGE TAPE BUYS ARE ALWAYS AT FRY'S!!

COLORADO MEMORY SYSTEMS INC.



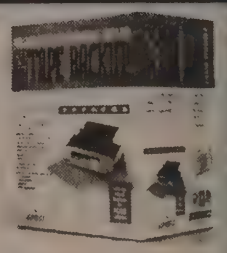
## 250MB TAPE BACK-UP

40/80/120/250 MB Format
Internal Drive runs off floppy controller
Uses DC-2120 Tapes

**$137**

Model DJ-20
#1610068

SUMMIT MEMORY SYSTEMS INC.



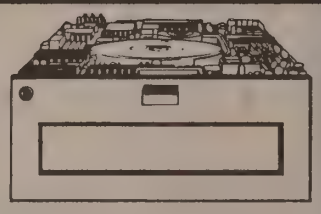
## 250MB TAPE BACK-UP

250MB Internal Tape Backup
Runs off of Floppy Controller
Central Point Software For Windows & DOS
2 Year Warranty

**$125**

SE250
#1635586

CONNER



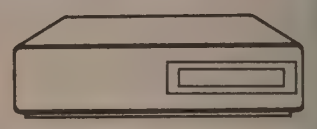
## 420MB INTERNAL TAPE DRIVE

- Plugs to floppy controller
- Includes 420MB tape cartridge

**$169**

#1975019

CONNER



## TAPE•STOR 250MB EXTERNAL PARALLEL PORT TAPE BACK-UP

Up To 250MB Back-up, External, Plugs Into Parallel Port.

**$269**

#1948851

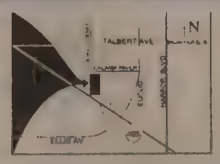
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

FRY'S ELECTRONICS

Prices Good Through March 28, 1995

Limit Rights Reserved
Not responsible for typographical errors

**STORE HOURS**
**MONDAY - FRIDAY**
**8AM - 9PM**
**SATURDAY**
**9AM - 8PM**
**SUNDAY**
**9AM - 7PM**



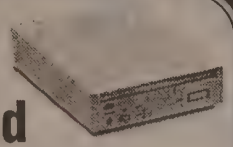
**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
Discover, Visa and MasterCard Accepted

# CD-ROM DRIVES AND SPEAKERS

## Mitsumi CRMC-FX400 Quad-Speed CD-ROM Drive

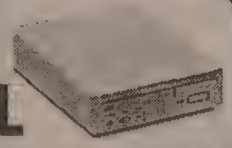


- IDE Quad-Speed CD-ROM Drive
- 230MSec Access Time
- 600KB Transfer Rate
- Requires Enhanced IDE Controller Card

#1986781

**$229**

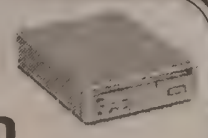
## PLEXTOR Formerly Texel INTERNAL QUAD-SPEED CD-ROM



SCSI CD-ROM
150ms Access
600KB/sec Transfer Rate
1MB Buffer
2 Year Warranty
TXL-PX-43CH
#1934957

**$399**

## TOSHIBA INTERNAL QUAD-SPEED SCSI-II CD-ROM

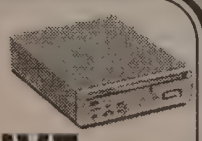


- 120 MSec Seek Time
- 150MS Access Time
- 600KB Transfer Rate

3501
#1962839

**$289**

## Sun Moon Star INTERNAL CD-ROM DRIVE



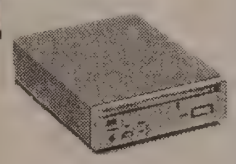
**SONY CDU-55E with Controller Card**

- 250 ms access time
- 256 KB cache memory
- 300KB per second Data Transfer Rate
- Multi session Kodak Photo CD

CDU-55E
#1981683

**$149.99**

## DOUBLE-SPEED INTERNAL CD-ROM



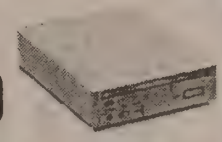
- 320ms access
- The Entertainer CD
- 11 CD titles

CDD25
#1916953

REVEAL COMPUTER PRODUCTS

**$219.99**

## DOUBLE SPEED CD-ROM KIT



- 250 ms Access Time
- 300 KB/S Transfer Rate
- With interface card

#1964853

**$139.99**

## Portable CD-ROM Player

MEDIA VISION

Double-Speed CD-ROM Drive
- Data transfer rate: 306KB/sec
- Access time: 180ms
- Interface: SCS12
- Photo CD multi-session compatible
- Stereo headphones
- Protective carrying case
- AC adapter & cables included

#1901117

**$298**

## CREATIVE MULTIMEDIA SPEAKERS SBS-300

CREATIVE LABS, INC.

Enhance your multimedia experience. Provides endless hours of deep acoustic audio reproduction. Includes 14v DC power supply.
#1829062

**$99.99**

## Labtec CD-I SPEAKERS

- Shielded Computer Speakers
- Works with Sound Cards that have 3.5mm jacks
- 3.6 Watts x 2

CD-1
#1945331

**$11.99**

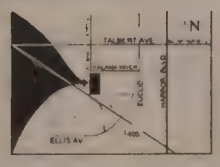
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

**Fry's ELECTRONICS**

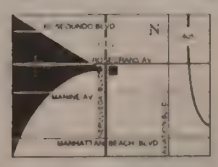
*Prices Good Through March 28, 1995*

*Limit Rights Reserved Not responsible for typographical errors.*

**STORE HOURS**
**MONDAY-FRIDAY**
**8AM - 9PM**
**SATURDAY**
**9AM - 8PM**
**SUNDAY**
**9AM - 7PM**



***Fountain Valley***
**10800 Kalama River Ave.**
**(714) 378-4400**
**CORP. P.O. FAX (714) 378-4444**



***Manhattan Beach***
**3600 Sepulveda Blvd.**
**(310) 364-FRYS (3797)**
**CORP. P.O. FAX (310) 364-3700**

DISCOVER NOVUS
VISA
MasterCard

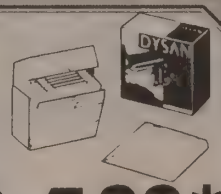
**Discover, VISA and MasterCard Accepted**

# DYSAN™ STORAGE MEDIA

SAVE THE THINGS THAT MATTER MOST™

DYSAN

## 3.5" DS/HD IBM FORMATTED DISKETTES



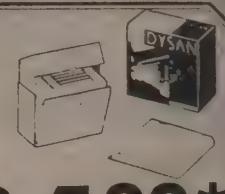
**Plastic Disk Box Included**
**All Packaging Made With Recycled Materials**
Box Of Ten
#1729049

**$4.99***

*After $2 Mail-in Rebate. In-store Cost $6.99

DYSAN

## 3.5" DS/HD MAC FORMATTED DISKETTES



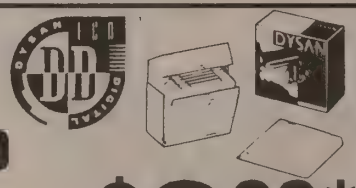
**Plastic Disk Box Included**
**All Packaging Made With Recycled Materials**
Box Of Ten
#1729083

**$4.99***

*After $2 Mail-in Rebate. In-store Cost $6.99

DYSAN

## 3.5" DS/DD IBM FORMATTED DISKETTES



**Plastic Disk Box Included**
**All Packaging Made With Recycled Materials**
Box Of Ten
#1729027

**$3.99***

*After $2 Mail-in Rebate. In-store Cost $5.99

DYSAN

## 5.25" DS/HD IBM FORMATTED DISKETTES

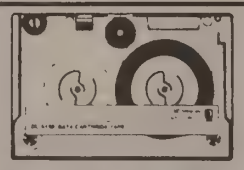
**Plastic Disk Box Included**
**All Packaging Made With Recycled Materials**
Box Of Ten
#1729005

**$3.99***

*After $2 Mail-in Rebate. In-store Cost $5.99

DYSAN

## DY2120 120MB DATA CARTRIDGE



- 1/4" Tape
- Unformatted

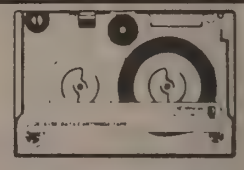
#1781496

**$9.99***

*After $2 Mail-in Rebate. In-store Cost $11.99

DYSAN

## DY2120 120MB DATA CARTRIDGE



- QIC-80
- Formatted

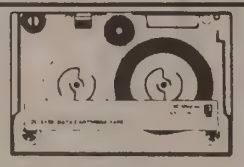
#1783443

**$11.99***

*After $2 Mail-in Rebate. In-store Cost $13.99

DYSAN

## DY6250 250MB DATA CARTRIDGE



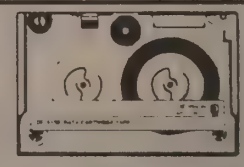
- Unformatted

#1781500

**$16.99**

DYSAN

## DY600A 60MB DATA CARTRIDGE



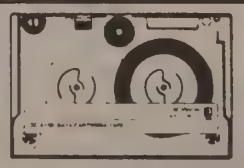
- 1/4" Tape • Unformatted
- Dual Belted, Lifetime Warranty

#1786619

**$12.99**

DYSAN

## DY6150 150MB DATA CARTRIDGE



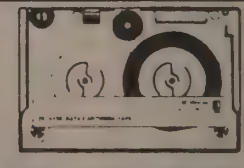
- 1/4" Tape • Unformatted
- Dual Belted, Lifetime Warranty

#1786620

**$13.99**

DYSAN

## DY2000 40MB DATA CARTRIDGE



- 1/4" Tape
- Unformatted

#1786631

**$8.99**

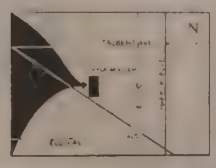
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

**Fry's ELECTRONICS**

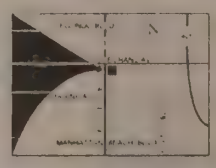
Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors

**STORE HOURS**
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



***Fountain Valley***
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



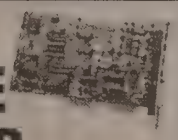
***Manhattan Beach***
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED

# MULTIMEDIA

Prometheus

## WAVETABLE SOUND CARD



**16-Bit Stereo Sound**
**32 Operator Wavetable Synthesizer**

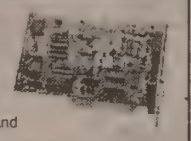
Advanced wavetable synthesis uses real instrument samples. It has the Digital Signal Processor (DSP). Features include Sound Blaster emulation, 16-bit stereo sound, 44.1 kHz record and playback, General MIDI compliant and a joystick port. It is upgradable to speech recognition game.

**$139.99**

#1972083

CREATIVE
CREATIVE LABS, INC.

## SOUND BLASTER 16 VALUE



- 8 and 16-bit stereo sampling/playback from 4-44.1 KHz
- Real-time, 16-bit software compression and decompression of sound files
- CD-ROM interface for Creative Labs CD-ROM drives
- Bundled Software: Monologue for Windows and several Creative Labs software utilities
- Windows 3.1, OS/2 and MPC2 compatible

**$94.99**

#1901818

TeleVideo
MULTIMEDIA

## TeleSound Pro 16

- True 16-bit CD-quality stereo sound FM sound board
- Full compatibility with all major sound standard including Sound Blaster, MPU 401, MT-32 and Windows Sound Systems.
- 8 and 16 digital recording and playback from4kHz to 44.1kHz sample rate
- Built-in CD-ROM interface supports Sony, Mitsumi, Panasonic and IDE
- EasyStart installation

**$89.99**

#1982053

TeleVideo
MULTIMEDIA

## TeleWave Audio 32

- DSP based wave table & FM synthesis combo sound board.
- 32 simultaneous stereo voice polyphony and General MIDI standard support with 128 instruments
- 2 MB of CD-quality sampled instruments sounds store in ROM
- Full Compatibility with all major sound standards including Sound Blaster, MPU 401, MT-32 and Windows Sound Systems.
- Built-in CD-ROM interface supports Sony, Mitsumi, Panasonic and IDE.
- Easy start installation.

**$199.99**

#1982042

## PRO PC/TV PLUS PORTABLE PC-TO-TV ENCODER

- External VGA-to NTSC converter (VGA to TV/videotape) for your laptop or desktop PC
- Drives both VGA and TV simultaneously
- S-Video (SVHS) output for high quality video recordings/displays
- Anti-flicker circuit for sharp Windows display

AITech

**$189.99**

#1821433

## MULTIPRO CTV

**EXTERNAL VGA-TO-VIDEO/TV ENCODER FOR YOUR PC OR MACINTOSH**

- Record, edit or playback audio and video from your PC or Macintosh video output
- Easy to use and easy to install-just plug and play
- Supports up to 16.7 million (24-bit) colors with standard VGA (640x480) resolution
- Dual display support cability (VGA monitor and TV/VCR simultaneously).

AITech

**$279.99**

#1906835

STUDIO MAGIC

## PERSONAL VIDEO STUDIO

**PC Video Production Studio with built-in sound, video & computer graphics sequencer.**

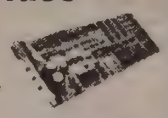
- Video Overlay/Titler
- Auto Production
- VGA/NTSC Preview Windows
- Transitions
- Chroma/Luma Special Effects

**$399.99**

#1936122

PRO SONIC SOUND CARD

## MEDIA VISION SOUND *SCSI CD-ROM Interface*



- 16-Bit Stereo Sound Card
- Complete Software Tool Kit
- Quick Start Intelligent Install Software
- Sound Blaster Compatible
- 3 Year Warranty

MEDIA VISION

MVS-030
#1990995

**$69.99**

REVEAL

## PC RADIO CARD

Tune to your favorite FM station while you work!
Turns your PC into a full featured FM radio.
Enjoy your favorite radio programs or news broadcasts right out of your PC, with this pre-amplified stereo FM card. The easy installation takes minutes. It has advanced features such as fine tune, auto scan, and a programmable 10 station memory.

**$39.99**

#1985816

REVEAL

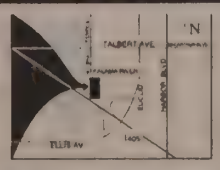
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

FRY'S ELECTRONICS

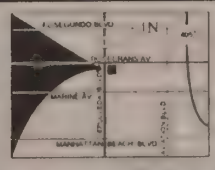
*Prices Good Through March 28, 1995*

*Limit Rights Reserved. Not responsible for typographical errors.*

**STORE HOURS**
**MONDAY-FRIDAY**
**8AM - 9PM**
**SATURDAY**
**9AM - 8PM**
**SUNDAY**
**9AM - 7PM**



***Fountain Valley***
**10800 Kalama River Ave.**
**(714) 378-4400**
**CORP. P.O. FAX (714) 378-4444**



***Manhattan Beach***
**3600 Sepulveda Blvd.**
**(310) 364-FRYS (3797)**
**CORP. P.O. FAX (310) 364-3700**

DISCOVER
NOVUS
VISA
MasterCard

**DISCOVER, VISA AND MASTERCARD ACCEPTED**

# MULTIMEDIA

## MULTIMEDIA VALUE KIT

- Double-Speed CD-ROM Drive
- 16 Bit Sound Card
- Speakers, Headphone, Microphone

20 SOFTWARE TITLES!

$189

VM300
#1964842

## MEDIA VISION MULTIMEDIA KIT

- Double-Speed Sanyo CD-ROM Drive with a 250ms access time
- 16-Bit sound card
- Improved ease of installation
- Speakers

**6 Software Titles!**

$198

MV1100
#1957554

MEDIA VISION

## MULTIMEDIA KIT

REVEAL COMPUTER PRODUCTS

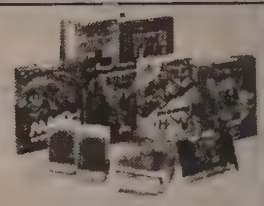
- Double-Speed internal CD-ROM Drive
- 16 Bit Stereo Sound Card
- Pair of stereo speakers (RS250)
- Headphones, cables, and installation video

**14 Software Titles!**

$339.99

MFX03
#1945777

## DIAMOND MULTIMEDIA Multimedia Kit 3000



**Learning Made Fun With Multimedia**

**Quad-Speed CD-ROM Drive** • 16-Bit Sound Card Speakers • Cables and Screws • Installation Video Manuals • Installation Diskette
**Bundled Education Software Titles:** Compton's 1995 Encyclopedia, Sierra On-Line's Alphabet Blocks, Broderbund's Arthur's Birthday, Broderbund's Math Workshop, Edmark's Thinking Things I, Midisoft's MusicMentor

$398

#1993699

## DIAMOND MULTIMEDIA Multimedia Kit 6000

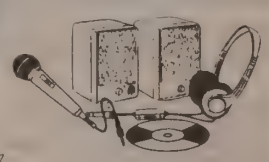
**Small Office/Home Office Multimedia**

**Quad-Speed CD-ROM Drive** • 16-Bit Sound Card Speakers • Cables and Screws • Installation Video Manuals • Installation Diskette
**Bundled Finance Home Productivity Software Titles:** Compton's 1995 Encyclopedia, Intuit's Quicken, Berkeley System's Expresso, Rand McNally's TripMaker, Shapeware's Vision, Macromedia's Action

$398

#1993688

## MULTIMEDIA PACK



- Speakers
- Headphones
- Microphones

FREE! 20 SOFTWARE TITLES!

$15.99

VM400
#1964864

## CREATIVE CREATIVE LABS, INC. DIGITAL SCHOOL HOUSE KIT

- SB 16 Value Sound Card
- Double-Speed Internal CD-ROM
- 14 Educational Software Titles

$269

#1966774

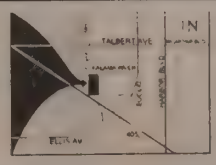
*HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®*

FRY'S ELECTRONICS

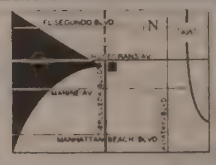
*Prices Good Through March 28, 1995*

*Limit Rights Reserved. Not responsible for typographical errors.*

**STORE HOURS**
**MONDAY-FRIDAY**
**8AM - 9PM**
**SATURDAY**
**9AM - 8PM**
**SUNDAY**
**9AM - 7PM**




***Fountain Valley***
**10800 Kalama River Ave.**
**(714) 378-4400**
**CORP. P.O. FAX (714) 378-4444**



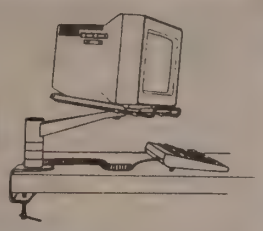

***Manhattan Beach***
**3600 Sepulveda Blvd.**
**(310) 364-FRYS (3797)**
**CORP. P.O. FAX (310) 364-3700**

DISCOVER, VISA AND MASTERCARD ACCEPTED

# DESKTOP ACCESSORIES!

MicroComputer Accessories, Inc.
A Rubbermaid Company

## MONITOR ARM



Holds Monitors with a 12" x 12" separation up to 40 lbs. Built-in chrome handle extends to hold 9-1/4" wide keyboard. Made of platinum colored steel. 8 lbs
MCA 6150
#1544532

**$47.99**

MicroComputer Accessories, Inc.
A Rubbermaid Company

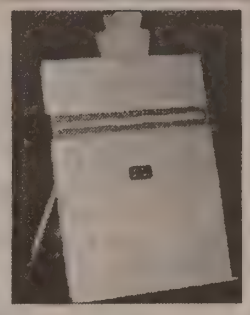
## EASYVUE™ VDT PLATFORM

- Regain work space by lifting monitor off desktop
- Handy tray stores papers, books and small items

6830
#1716814

**$16.99**

## EASEL COPY HOLDER



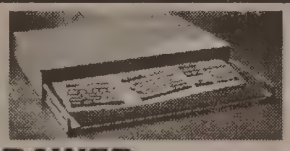
- Ease Neck Strain and Eye Fatigue
- 8-1/2" x 11" or 8-1/2" x 14" A4 Size
- Smooth Line Guide
- Standard or Metric Ruler
- Made of Durable, Molded Plastic

05218
#1695919

**$4.49**

PC CONCEPTS

## ERGONOMIC KEYBOARD DRAWER W/WRIST REST



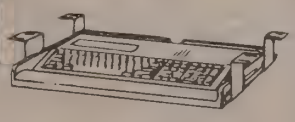
**Keyboard Drawer**
- Safely and conveniently stores keyboard and mouse
- Non-skid pads protect furniture and prevent creeping of drawer
- Extra wide to accommodate "101" styled keyboards and most "ergonomic" styled keyboards
- Drawer locks into position when fully extended

**Wrist Rest**
- Removable • Available in a variety of colors
- Oversized to accommodate both keyboard and mouse/trackball

82015
#1997534

**$32.99**

## STANDARD KEYBOARD DRAWER



Space saving way to hold keyboard securely under the desk or counter.
05106
#1695861

**$23.99**

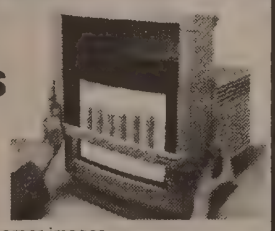
MicroComputer Accessories, Inc.
A Rubbermaid Company

## UNDERDESK KEYBOARD DRAWER

Mounts underneath work surface to reduce desktop clutter. Holds most regular enhanced keyboards.
6110
#1543597

**$16.99**

## OCLI Maximum Plus Glare/Guard



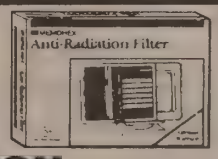
- Optically-coated glass anti-glare filter blocks monitor glare and radiation
- Fits 16" to 17" monitors
- Lets you view true colors and sharper images
- Controls harsh glare and screen washout
- Blocks 99% of glass glare
- Blocks 99.9% of ELF/VLF E-field radiation

#1937857

**$99.99**

MEMOREX COMPUTER SUPPLIES

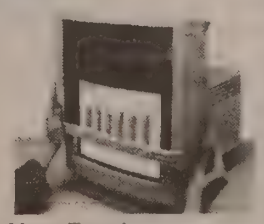
## UNIVERSAL ANTI-RADIATION FILTER




For monitors up to 15" 99% Glare Reduction
98% Very Low Frequency & Extremely Low Frequency E-Field Radiation Protection
#1672921

**$44.99**

## OCLI Glare Guard



**Superior Protection for Your Eyes!**
- Cuts Glare by 95%
- Durable Tempered Safety Glass
- One Year Warranty

#1937835

**$29.99**

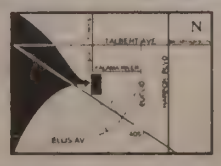
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

ELECTRONICS Fry's

*Prices Good Through March 28, 1995*

*Limit Rights Reserved Not responsible for typographical errors.*

**STORE HOURS**
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm



***Fountain Valley***
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

***Manhattan Beach***
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

# YOUR CD-ROM SOFTWARE BUYS ARE ALWAYS AT FRY'S!

## Microsoft® ENCARTA™ '95
**The Complete Interactive Multimedia Encyclopedia**

Great features make it easy to use.
- Quick reference • Find wizard • On screen navigation tips
- 26000 fully updated articles • 8 hours of sound • 7000 photos
- 100 animations/video clips.

**$79.95**

IBM CD-ROM
#1966785

## Broderbund MYST PC CD-ROM

Myst is an adventure game unlike any other, with stunning 3-D photo realistic worlds. Myst is a surrealistic exploration, where every vibrant rock, scrap of paper and sound may hold vital clues to your unraveling a chilling tale of intrigue and deceit.

**$41.95**

IBM CD-ROM
#1893399

## ORIGIN We create worlds. WING COMMANDER 3: HEART OF THE TIGER

Is the first true interactive movie for your home PC. Features:
- Fifty intense missions each with photo-realistic, 3D space combat
- Full 16-bit digital view, 3D navigation system, stealth technology
- Play directly from CD
- Over 3 hours of live-action video plus dozens of hours of gameplay.

**$54.95**

IBM CD-ROM
#1969456

## Spectrum HoloByte FALCON GOLD

Falcon Gold is a collection of the award-winning Falcon® 3.0, Operation: Fighting Tiger™, Hornet: Naval Strike Fighter™, MiG-29™ and Art of the Kill on CD-ROM. New, improved flight models for even more exciting combat. Multi-player modem, direct connect or network play

**$59.95**

IBM CD-ROM
#1945364

## Compton's NewMedia
**The New Compton's Interactive Encyclopedia 1995 Edition for Windows CD-ROM**

Helps you learn without any limits. Features:
- Over 35,000 articles • More than 8000 pictures
- Over 100 Full-motion videos, 3-D animations and presentations
- Natural language idea search
- On-line dictionary
- Up-to-date interactive atlas
- Over 15 hours of sounds

**$59.95**

IBM CD-ROM
#1950498

## Microsoft® CINEMANIA 1995 FOR WINDOWS™ CD-ROM

Is your personal guide to the world's films - complete with reviews, biographies, video and audio clips, and cinema insights. Nearly 20,000 movies, and 4000 biographies of stars are covered in detail.

**$59.95**

IBM CD-ROM
#1960158

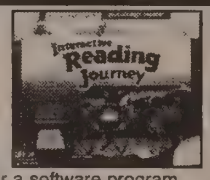
## X-WING Collector Edition

The complete X-Wing Collection combines all three most popular space simulation games- X-Wings, Imperial Pursuit, and B-Wing in one CD-ROM Disk. New and enhanced feature:
- Six brand-new missions • Improved 3D graphics
- Voice and upgraded sound

**$49.95**

IBM CD-ROM
#1978964

## The Learning Company® Reader Rabbits Reading Journey




combines interactive technology with a proven reading curriculum to deliver a software program that allows children to become successful readers. Includes:
- 40 simple reading books
- over 100 playful phonics activities
- 40 printed storybooks.

**$79.95**

WIN/MAC CD-ROM
#1970221

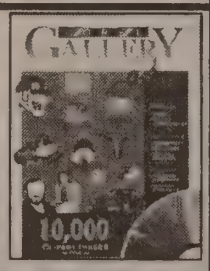
## Microsoft® Ancient Lands CD-ROM

will help you to discover through rich images, sound, animation, and video, the mysteries and marvels of life in ancient times.

**$49.95**

IBM CD-ROM
#1923942

## COREL GALLERY CD-ROM




Add flair to your word processing and presentations with over 10,000 clip art images. Includes visual clip art manager; the simplest way to view and choose your clip art.

**$35.95**

IBM CD-ROM
#1908516

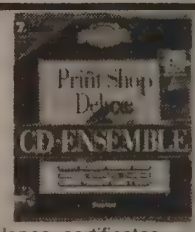
## SIERRA King's Quest VII: The Princeless Bride

The Seventh and most exciting chapter in one of the best computer game series. Created by author Roberta Williams with breathtaking animation. Fully orchestrated with over 100 melodies. Plunge headlong into a legendary tale of magic and enchantment your whole family will love.

**$54.95**

IBM CD-ROM
#1967845

## Broderbund THE PRINT SHOP DELUXE CD-ENSEMBLE




Create stunning greeting cards, envelopes, certificates, calendars, banners, business cards, and more. Five great products on one CD.

**$79.95**

IBM CD-ROM
#1952836

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

FRY'S ELECTRONICS

Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

**STORE HOURS**
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

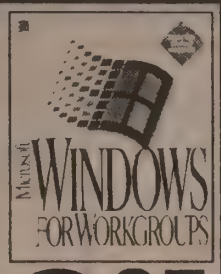
**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

# YOUR BEST SOFTWARE BUYS ARE ALWAYS AT FRY'S!

## Microsoft® WINDOWS™ for WORKGROUPS 3.11




All the software you need to start a cost-effective network. Now Windows™ for Workgroups makes networking not only easy but fast. Easily share documents, printers and even messages with everyone in your work group.

**$129.95**

IBM
#1876547

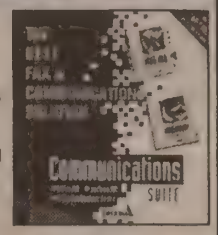
## Intuit Quicken 4.0 DELUXE for Windows™

The best-selling financial software just got better. Quick and easy in organizing your finances, loans, investments, budgeting and planning.

**$59.95**

IBM
#1955909

## COMMUNICATIONS SUITE V2.1 FOR WINDOWS™




**Powerful Fax and Communications Software that Work Together**

Now you can get the world's best-selling fax software together with a powerful and easy to use communications application in one affordable package: Delrina Communications Suite™. Together, Delrina WinFax PRO™ 4.0 and Delrina WinComm PRO™ set a new standard for ease of use nd integration.

**$99.95**

IBM
#1964912

DELRINA

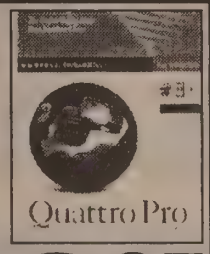
## Microsoft® Office Access 2.0 for Windows™

Microsoft® Access relational database management system is as easy to use as it is flexible and powerful. The visual approach to managing, financing, presenting, and sharing data lets you work the way you want. Right away. And that makes Microsoft® Access the database that is hardworking without the hard work.

**$279.95**

WIN
#1912074

## NOVELL Quattro Pro 6.0 for Windows™

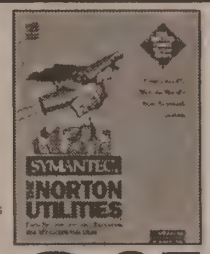



is the perfect combination of spreadsheet power and stunning graphics. Licensed users of Quattro Pro 5.0 or earlier versions can upgrade today for a special price.

**$48.95**

IBM
#1965669

## SYMANTEC. THE NORTON UTILITIES VERSION 8.0

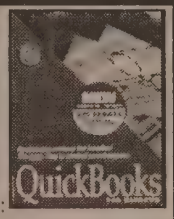



The best selling Norton Utilities now does Windows! The New Norton Utilities 8.0 Contains all the powerful tools that have made it the worldwide standard for data protection and recovery

**$119.95**

IBM
#1897441

## Intuit QuickBooks For Windows™




Quickbooks is the easiest and fastest way to organize your business. Features:
- No accounting knowledge needed
- Works like Quicken
- Tracks your whole business

**$99.95**

IBM
#1966981

## SYMANTEC. ACT! 2.0 for Windows™

Is an easy-to-use personal information manger that gives you instant information. Look up names, addresses, and phone numbers in seconds, and it comes with a featured word processor and report generator.

**$179.95**

IBM
#1897452

## Lotus Organizer 2.0 for Windows™

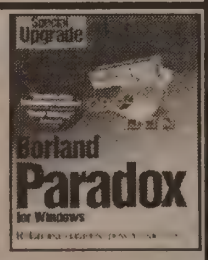
**Over 100 new features to boost your productivity and simplify your life!**

Lotus Organizer 2.0 integrates an on-screen Calendar, To-Do List, Planner, Address Book, Call Manager, Notepad, and Anniversary Reminder, along with group scheduling via Lotus Notes and ccMail.

**$89.95**

IBM
#1984284

## BORLAND Paradox 5.0 Upgrade for Windows™




**Relational database power made easy.**

Now, the best Windows database is even better. Easier to use, with powerful new features, greatly increased speed, and improved connectivity. No other Windows database makes it so easy, or gives you this much power.

**$129.95**

IBM
#1937422

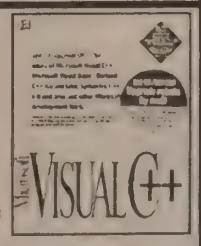
## LAPLINK TRAVELING SOFTWARE For Windows™

The best file transfer software is even better with this new windows™ version - simple and reliable. Features include:
- Full-featured remote control and file transfer.
- SpeedSync™ for the fastest modem file transfer
- Serial and parallel cables included.

**$129.95**

IBM
#1943155

## Microsoft® Visual C++ Pro 2 Upgrade For Windows™




Special upgrade offer for users of Microsoft® Visual C++, Microsoft® Visual Basic, Borland C++ 4.0 and later, Symantec C++ 6.0 and later, and other Microsoft® development tools. Proof of ownership required.

**$249.95**

IBM CD-ROM
#1962954

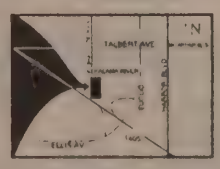
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

ELECTRONICS Fry's

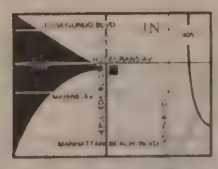
Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

**STORE HOURS**
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

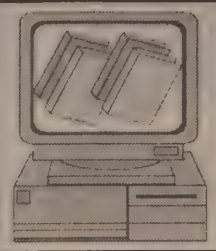


**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED



# COMPUTER BOOKS

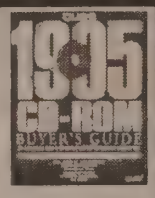
## USING OS2 WARP
**Version 3 Special Edition**

Learn OS/2 efficiently with straightforward information on installing, configuring and troubleshooting your desktop. You get expert advice on everything from connecting to the Internet to running current OS/2, Windows, and DOS applications. With this book by your side, OS/2 Warp will work for you.

**$22.95**

#1990294

## QUE'S 1995 CD-ROM BUYERS GUIDE
**The Authoritative Guide for Choosing the CD-ROM Software that's Right for You!**

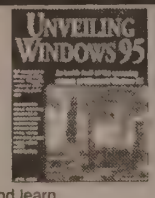


Make informed purchasing decisions on:
DOS, Windows, and Macintosh
Multimedia Software
Educational Titles
Interactive Games
Electronic References
And More!

**$14.95**

#1984321

## UNVEILING WINDOWS™ '95

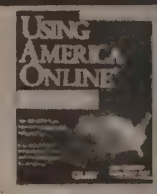


Get an unbiased view of the significance of each new Windows 95 feature to home and business computer users, and learn what's in store for PC administrators and programmers. Expert tips show you the easiest way to upgrade from Windows 3.1+ and quickly become Windows '95 productive.

**$18.95**

#1984343

## USING AMERICA ONLINE
**SECOND EDITION**



This book shows you how to save time and money- before you log on. Discover how to get started with the America Online software, how to find your way around the Windows or Macintosh screen, and how things like chat rooms and forums work. You can efficiently write E-mail offline, download software, chat with other members, and use AOL's new Internet services.

**$14.95**

#1993013

**Using Visual Basic 3** #1848414 ..... **$25.95**

**Using Word for Windows™ Second Edtion** #1848447 ..... **$22.95**

**Using Microsoft Works 3.0 For Windows™** #1941485 ..... **$18.95**

**Using Powerpoint 4 For Windows™** #1941968 ..... **$22.95**

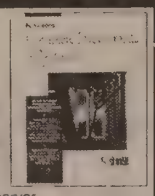
**Using Microsoft Office Special Edition** #1941979 ..... **$22.95**

**Que's Big Mac Book Fourth Edition** #1809273 ..... **$22.95**

**WordPerfect 6 for Windows Second Edition** #1941991 ..... **$16.95**

**Using Access 2 For Windows™** #1932612 **$22.95**

## NOVELL'S COMPLETE ENCYCLOPEDIA OF NETWORKING

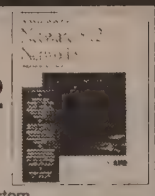


- By far the most comprehensive networking reference available.
- Covers operating systems, client-server, standards, cabling, devices, interoperability, servers, protocols, data communications, network management, security, and more.
- Enclosed CD includes an electronic version of the entire encyclopedia text, including tables and graphics.

**$41.95**

#1992942

## NOVELL'S GUIDE TO NETWARE 3.12 NETWORKS



Novell's Guide To NetWare 3.12 Networks is an easy-to-follow guide, using Novell's network system software. Presented in a logical, step-by-step format, this book gives you everything you need to set up your NetWare network and keep it running smoothly.

**$26.95**

#1848207

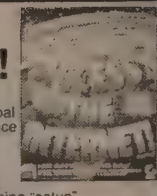
## THE COMPACT GUIDE TO LOTUS SMARTSUITE

The official guide to Lotus SmartSuite
- Covers 1-2-3 Release 5, Ami Pro 3.1, Approach 3, Freelance Graphics 2.1, and Organizer 1.1 - All for Windows.
- Saves you the expense of purchasing a different book for each SmartSuite program
- Shows you how to combine the programs for maximum productivity.

**$22.95**

#1937374

## ACCESS THE INTERNET!



You've heard about the exciting possibilities of the Internet, the global network of networks. Now experience the information revolution yourself, with this outstanding book/disk combination. You get:
- A direct connection to the Internet with NetCruiser, installed just by typing "setup"
- A Windows interface to the Internet, giving you graphics and multimedia capabilities
- All the tools you need to explore the Internet in one package
- On-line updates to both the software and this book

**$14.95**

#1946882

**Corel Draw 5 Quick & Easy** #1940509 ..... **$14.95**

**Simcity 2000 Strategies & Secrets** #1940727 ..... **$11.95**

**Your First Computer Second Edition** #1911110 ..... **$14.95**

**Masatering MS Visual C++ Programming** #1879436 ..... **$29.95**

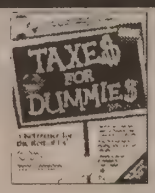
**Murphy's Laws of DOS Second Edition** #1920178 ..... **$12.95**

**Mastering Excel 5 For Windows™** #1920341 ..... **$22.95**

**Mastering Sun/OS Angell** #1569049 ..... **$25.95**

**Quicktime HT Book** #1802955 ..... **$22.95**

## TAXES FOR DUMMIES



- The fun and easy way to learn to prepare your taxes and save a bundle
- Your first aid kit for dealing with taxes and the IRS
- Pitfallis to avoid - explained in plain English

**$11.95**

#1990272

## MACWORLD PHOTOSHOP 3.0 BIBLE

Your definitive reference to image editing with Adobe Photoshop 3.
Featuring hundreds of new tips and techniques on electronic painting, retouching, and special effects.

**$29.95**

#1941223

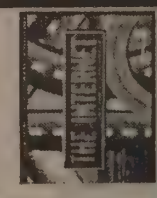
## THE 1994 INTERNET WHITE PAGE

COMPREHENSIVE
New! The first annual Internet directory with over 100,000 Internet address listings at your fingertips!
EASY LOOK-UP
The quickest source for finding over 100,000 individual Internet users. Easy A to Z listings plus special "Hot Pages" of Internet access providers.

**$22.95**

#1928604

## THE INTERNET



**The official book of the Public Television presentation "The Internet Show"**

Everything you need to know about the information superhighway.
What is the Internet?
What can the Internet do for you?
How do you connect?
What can you find On-line?

**$18.95**

#1992997

**WordPerfect 6 For Dummies** #1927809 ..... **$12.95**

**Word 6 For Windows For Dummies** #1940912 ..... **$12.95**

**Macworld Pagemaker 5 Bible** #1940624 ..... **$29.95**

**Windows Gizmos With Disk** #1766668 ..... **$29.95**

**Internet Direct Connect Kit** #1992791 ..... **$22.95**

**Illustrated Computer Dictionary For Dummies** #1829327 ..... **$9.95**

**Quicken 5 For Mac For Dummies** #1997202 ..... **$14.95**

**Harvard Graphics For Windows** #1940543 ..... **$14.95**

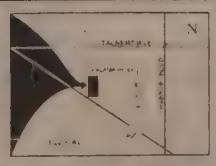
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

**Fry's ELECTRONICS**

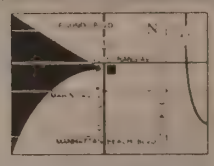
Prices Good Through March 28, 1995

Limit Rights Reserved
Not responsible for typographical errors

**STORE HOURS**
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



***Fountain Valley***
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



***Manhattan Beach***
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED

# Input Devices

## INTEGRATED TECHNOLOGY
## COMPUPHONE 2000

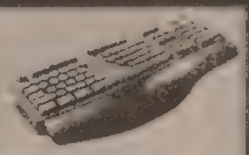
**Full Featured Telephone and Keyboard in One!**

- Includes Hands Free Headset
- Includes Software which can track calls and act as an auto dialer
- Keyboard rings on Incoming calls
- Standard 101-Key layout

**$99.99**

#1989968

## Microsoft®
## Natural Keyboard

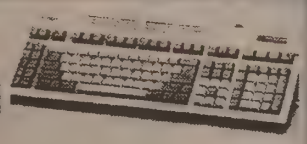


- Split-key, sloped keyboard design promotes a natural wrist position
- Built-in palm rest provides a comfortable resting place for hands while not typing
- Soft, tactile key action
- Standard layout minimizes time required for adapting to split keyboard

**$89.99**

#1952593

## Focus
## 101-KEYBOARD



Precision performance in a 101 Keyboard for IBM PC/AT, PS/2 and compatibles • Calculator built-in. This keyboard will stand up to the rigorous demands of today's fast-paced computing environment.

**$49.99**

#1703760

## MICROSPEED KB101M
## 101-KEYBOARD

Keyboard Deluxe combines quality you can depend on with deluxe features - all in a familiar 101 key layout.. Deluxe features include:

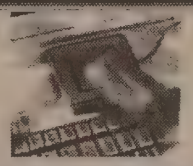
- Two cable outlets • PS/2 cable adapter
- Tactile key feel
- Large L-shaped return key makes data entry a breeze
- 100% IBM® PC/AT, PS/2® and Novelle Netware compatible

**$43.99**

#1796379

GLIDEPOINT

## TrackPad



**The World's Newest Pointing Device is Operated by the World's Oldest.**

It's an easy-to-use, high resolution touch surface that instantly puts a powerful pointing device in the tip of your finger, and makes using your portable more comfortable, intuitive, and productive.

**$69.99**

#1960804

## LOGITECH
## TRACKMAN

**The Confortable high-performance stationary mouse** is designed for even the most cluttered desks. And, because it doesn't move, the cord can't become tangled or caught. Additionally, the Superior Software, allows for one click short-cuts making computing faster and easier. This mouse is designed for right hands.

LOGITECH

**$84.99**

#1825699

## HiMouse Cordless

- 3 button, DB-9 pin connects with PC serial port
- Switchable between Microsoft and Mouse Systems modes
- Infrared technology gives mouse freedom from up to 2 meters away
- Automatically recharges when placed back in the receiver

Genius

**$49.99**

#1963531

## PROGRAMMABLE
## 3 BUTTON MOUSE

- Ergonomic Design
- 400 DPI
- Total Microsoft Compatibility
- Serial & PS/2 Connectors
- Fully Programmable

LOGITECH

**$44.99**

#1825666

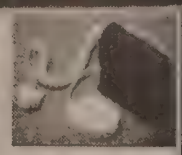
## ACECAT PC
## GRAPHICS TABLET
## & MOUSE EMULATOR

- 1000 Lines Per Inch
- 5" X 5" Active Area.
- Includes: Stylus-Pen and Comprehensive Utilities Diskette Including Custom Drivers for Mouse, Windows, Control Panel and ADI.

**$99.99**

#1659900

## POCKET MOUSE



Features:
100% Microsoft® serial mouse, Tangle-free coil cord, Dynamic resoultion: 130DPI
Package includes:
Pocket Mouse, Travel Pouch, Mouse driver

QuickShot® by Bondwell

**$14.99**

#1932450

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

ELECTRONICS
Fry's

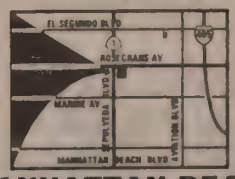
Prices Good Through March 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

**STORE HOURS**
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

**Corporate PO Fax Numbers**

**FOUNTAIN VALLEY**
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

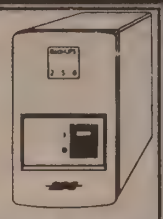



**MANHATTAN BEACH**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

# SURGE PROTECTION

## POWERCELL 250
## 250 VOLT/AMP
## BACK-UP POWER SUPPLY
## UNINTERRUPTABLE
## POWER SUPPLY



- 480 Joule Surge Protection Built In
- 2-Outlet
- Modified Sine Wave Output

APC
AMERICAN POWER CONVERSION

#1851362

**$97.99**

## UPS500 UL 1778
## 500 VOLT/AMP UPS.

- USER REPLACEBLE BATTERIES.
- 4 UPS/SURGE PLUGS 2 SURGE

WABER, INC.
A Subsidiary of SL Industries, Inc

#1840944

**$199.99**

## POWER CENTER

WITH FAX MODEM PROTECTION

- 5-outlet surge protector
- 5 individual controls
- Lighted master on/off switch.

Interex® Computer Products

#1976456

**$17.49**

## 5-OUTLET POWER CENTER

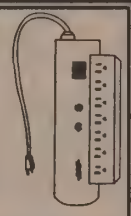
- UL 1449
- 25 Joules Dissipation
- EMI/RFI Noise Filtering
- 5-Outlet
- Master Power Switch

MEMOREX COMPUTER SUPPLIES

#1672965

**$19.99**

## 7-OUTLET SURGE ARREST



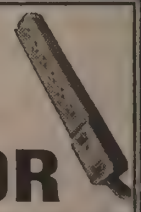
- 240 Joules Dissipation
- Site fault wiring indicator
- Reduce Intermittent Lock Ups and Parity Errors with EMI/RFI Filtering

APC
AMERICAN POWER CONVERSION

#1651256

**$18.99**

## POWERTREE 10
## 6-OUTLET SURGE PROTECTOR



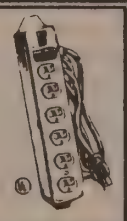
- Suppresses Surges up to 120 Joules
- 15 AMP Circuit Breaker
- PlatinumColor
- 6-outlet

KENSINGTON

#1423578

**$12.99**

AVOID SYSTEM MELTDOWN
## 6-OUTLET SURGE PROTECTOR



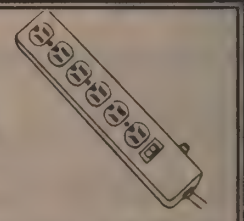
- PM6SP2
- 140 Joules
- Noise Filtering
- Five Year Warranty

WABER, INC.
A Subsidiary of SL Industries, Inc.

#1840885

**$5.99**

## 6-OUTLET BASIC SURGE PROTECTOR



Clamping ResponseTime <1 Nanosecond
Energy Dissipation 60 Joules

#1619399

**$1.99***

*After $2 Mail-In Rebate. In-Store Price... $3.99

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

Fry's ELECTRONICS

Prices Good Through March 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

**STORE HOURS**
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers

**FOUNTAIN VALLEY**
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

**MANHATTAN BEACH**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

brother®

We're at your side.

# THE WORLD'S BEST FAX MACHINES

brother

THERMA PLUS PAPER

## FAX MACHINE
### WITH PAPER CUTTER

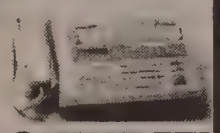
Brother's breakthrough fax machine incorporates newly developed therma plus technology which uses fax paper that feels like plain paper and reduces print fading (lasts 3 times longer than thermal paper under normal filing conditions, and you can even use a highlighter!). Other features include, 10 page document feeder, 15 station memory, 16 level grey scale, activity report, polling and much more for only...

**$249**

Model FAX-620
#1896510

brother

THERMA PLUS PAPER



## FAX MACHINE
### WITH 256K MEMORY, OUT OF PAPER RECEPTION & BROADCASTING

If your looking for a fax machine for your home office or workplace, look no further than this premium valued fax machine from Brother that incorporates 256K memory for Out-of-Paper Reception and Sequential broadcasting with Auto Paper Cutter, 60 Station Memory, 32 Level Gray Scale, 16 Digit LCD Display, 15 Page Document Feeder, Therma Plus paper capacity, an Anti-Curl System, Super Quick-Scan, Alphabetic Telephone Index, and much more! An excellent value at only...

**$299**

Model FAX-740
#1985218

brother

THERMA PLUS PAPER

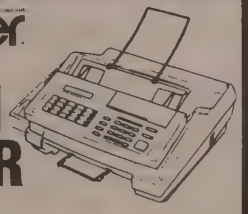
## FAX MACHINE
### WITH 1MB MESSAGE CENTER & PC LINK CAPABLE

Brothers revolutionary fax machine offers a digital message center for either18 minutes of recording, up to 50 page of memory for out of paper reception, or you can configure the storage memory to be usedon a first come first serve basis. The optional missing link will allow this fax machine to act as a PC/fax modem, a scanner, and a printer! Other feature include anti-curl system, uses ThermaPlus paper, quick-scan, 164' paper roll capacity, 15 page document feeder, auto cutter, sequential broadcasting, and 60 number memory just to name a few.Now only...

**$399**

Model FAX-820
#1925195

brother



## PLAIN PAPER FAX
### WITH 256K MEMORY

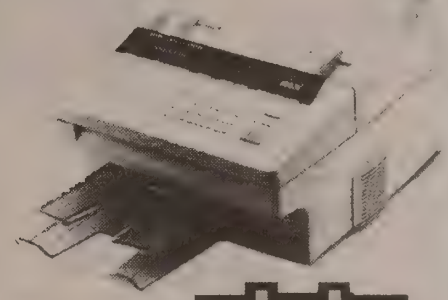
Brother's done it again! Last year Brother broke the $400 price barrier in paper cutter Fax, and for an encore, Brother has destroyed the $799 stand alone plain paper Fax barrier with this unbelieveable value. Its 200 sheet paper cassette, 30 page auto document feeder, on-screen programming, "smoothing" enhanced image resolution, 48 digit LCD display, multiple resolution transmission, 32 level grayscale, 160 station memory, and Fax/Tel Switch makes this the best value you will find at only.....

**$549**

Model FAX-980
#1801828

brother®

We're at your side.



## PLAIN PAPER LASER FAX AND COPY SYSTEM
### WITH PC LINK CAPABILITY

missing link

Brothers state-of-the-art Laser fax machine combines laser print quality with copier capabilities of up to 99 continuous copies along with reduction and enlargement capabilities, and PC Link capability enabling you to utilize the laser fax machine as either a Scanner, PC/Fax Modem, or a printer! Other features include 256k memory for out of paper reception or sequential broadcasting, 30 page document feeder, 200 page sheet paper tray, 140 station memory, 32 level gray scale, and much much more! The best home office investment you will ever make at just...

**$799**

Model PPF-2500
#1925173

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

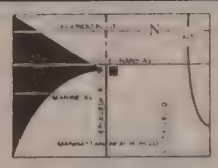
ELECTRONICS Fry's

Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

**STORE HOURS**
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

***Fountain Valley***
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



***Manhattan Beach***
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

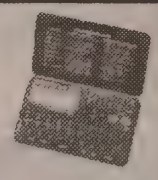
DISCOVER, VISA AND MASTERCARD ACCEPTED

# GET ORGANIZED AT FRY'S ELECTRONICS

## SHARP ORGANIZERS

SHARP

### 34K PERSONAL ORGANIZER



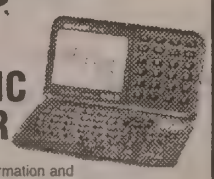
Perfect for the business person on-the-go, this compact data bank incorporates a 14 x 3 line display, built-in calendar, schedule, phone /memo, memo pad, expense, clock, anniversary, and calendar functions as well as QWERTY keyboard to simplify data entry. Once you've used this electronic marvel, you won't leave your home or office without it.

**$49.95**

Model YO-110
#1741472

SHARP

### 128K ELECTRONIC ORGANIZER



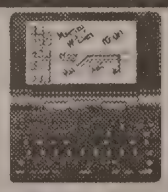
The Sharp YO-370 is a pocket sized, personal information and time management tool that allows you to link it to a PC (with optional accessory). Keep a log of all upcoming projects and sort your list by priority. Track your business and personal expenses and summarize them by day or between days. It also stores birthdays, anniversaries and holidays and provides advance warning for these important events. Stores 1,680 names and numbers or 1,040 schedule appointments (128K) all for the low price of

**$118.95**

Model YO-370
#1955367

SHARP

### 512K PEN BASED ORGANIZER



512K of memory, easy-to-use database, calendar, schedule, anniversary, phone directories, to do lists, PC/Mac connectivity as well as, standard infrared communications capability for sending data to another wizard or a printer, make this Sharp organizer an excellent investment for anyone with too much to do and to little time to do it in! Now just...

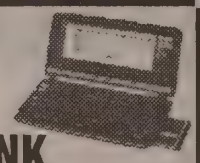
**$399**

Model OZ-9520
#1902897

## CASIO ORGANIZERS

CASIO

### 32KB DATA BANK



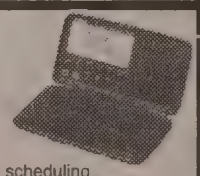
Perfect for the business person on the go, this compact data bank incorporates a 16 x 4 line display with a daily alarm, schedule alarm, calendar display, memo function, 6 currency conversion memories, and a clock with world time function (29 different time zones including 27 cities) all for only...

**$49.99**

Model SF-A10
#1728462

CASIO

### B.O.S.S. WITH 128K MEMORY



This business organizer scheduling system comes packed with powerful functions that are practical and easy to use. The QWERTY Keyboard, telephone directory, calendar, memo function, schedule alarm, world time function, home time function, and schedule keeper will prove to be an invaluable tool in keeping your busy days in order. An excellent investment at...

**$118.95**

Model SF-7900
#1956818

CASIO

### 256K EXECUTIVE B.O.S.S. WITH BUILT-IN SPREADSHEET

Casio's latest business organizer comes equipped with a business card management function, schedule function, two month calendar display, world time, a daily alarm , schedule alarm, telephone directory, memo functions, reminder function, to do list, cut & paste function, and spreadsheet function (compatible with Lotus 1-2-3 data) all displayed on a wide 40 character by 10 line screen. An invaluable investment at only....

**$259.99**

Model SF-R20
#1728473

## PALMTOP COMPUTERS

PSION SERIES 3

### POCKET SIZED 512K COMPUTER WITH BUILT-IN SPREADSHEETS

Psion has redefined the state of the art in hand held computers with the new Series 3. It may be small, but this pocket-sized programmable computer comes equippedwith features found in desktop machines plus powerful built-in software, including a full specification word processor and outliner that's compatible with Microsoft word. When using the Series 3 you will quickly learn from the system of graphic displays and option list how easy the Series 3 is to use. And with Psion's unique Multitasking Operating System, as many of the facilities as you want can be used at the same time! Other features include an automatic phone dialer,world information, a time and personal management file, powerful graphics programming language (OPL/w) which will enable you to write your own applications and two expansion ports for plug in SSD devices for unlimited memory and software.

**$399**

Model SERIES 3A
#1843567

HEWLETT PACKARD
*Authorized Dealer*

### 1MB PALMTOP COMPUTER WITH 80x25 FULL SCREEN MS-DOS 5.0 & BUILT-IN POCKET QUICKEN

The smallest, lightest HP PC ever comes equipped with complete organizer software to manage your time, tasks and data, plus you can retrieve information instantly with a full range of built-in personal productivity tools. The pull-down menus and dialogue boxes make it simple to master the familiar commands, and the high-resolution display with zoom option is easy to read ! With Lotus 1-2-3 built-in you will have full spreadsheet capability, including graphics and macros. Also includes CC:Mail built-in. Now only...

**$498.99**

Model HP-200LX
#1941670

### PCMCIA 1.5MB FLASH MEMORY CARD

For HP Palmtops
Maxtor 1.5MB

**$149.95**

Model Mobile MAX
#1979758

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

ELECTRONICS Fry's

*Prices Good Through March 28, 1995*

*Limit Rights Reserved. Not responsible for typographical errors*

**STORE HOURS**
**MON - FRI**
**8AM-9PM**
**SATURDAY**
**9AM - 8PM**
**SUNDAY**
**9AM - 7PM**

***Fountain Valley***
**10800 Kalama River Ave.**
**(714) 378-4400**
**CORP. P.O. FAX (714) 378-4444**

***Manhattan Beach***
**3600 Sepulveda Blvd.**
**(310) 364-FRYS (3797)**
**CORP. P.O. FAX (310) 364-3700**

DISCOVER, NOVUS
VISA
MasterCard

**DISCOVER, VISA AND MASTERCARD ACCEPTED**

# YOUR BEST PANASONIC HOME OFFICE BUYS ARE ALWAYS AT FRY'S

## BUSINESS PHONES

### Panasonic SPEAKERPHONE

For the office or home, this phone has all the features you need. It has a speaker phone, 28 station automatic dialer, automatic redial and much more.

**$49.95**

Model KX-T2315
#1530100

### Panasonic TWO LINE SPEAKERPHONE

A perfect compliment to your home or office, this two-line speakerphone comes equipped with 3-way conferencing, 20 number programmability, seperate ring switches for each line, and a local mode function. Now only...

**$69.95**

Model KX-T3120
#1510676

### Panasonic 2-LINE SPEAKERPHONE WITH LCD DISPLAY

From Panasonic comes this fully featured 2-line speakerphone with LCD display, 3-way conference call, volume control for speaker and handset, 24-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only...

**$89.95**

Model KX-T3175
#1745122

### Panasonic THREE LINE SPEAKERPHONE WITH LCD DISPLAY

From Panasonic comes this fully featured 3-line speakerphone with LCD display, 3-way conference call, volume control for speaker and handset, 48-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only...

**$169.95**

Model KX-T3185
#1768039

## HIGH TECH CORDLESS PHONES

### Panasonic 30 CHANNEL PALM-SIZED EXTENDED RANGE 900MHz CORDLESS PHONE

This Panasonic 900MHz cordless phone features a unique palm-sized design with lighted keypad, 30 channel access, high gain rubber antenna, reversible handset, sound charger, noise reduction technology, and more, all for just....

**$199.95**

Model KX-T9500
#1948839

### Panasonic 10 CHANNEL CORDLESS PHONE WITH 30 MINUTE CAPACITY ALL DIGITAL ANSWERING MACHINE

Panasonic has combined a premium performance 10 channel cordless phone with features that include LCD display on handset, 21 day battery stand by, intercom, 2-way paging, 10 number speed dialer and a 30 minute all digital answering machine that offers 4 mail boxes, voice time/day stamp, message scan (plays first 5 second of each ICM), message transfer, selective message delete, 2-way recording, and much more. Now only...

**$279.95**

Model KX-T4600
#1841934

## FAX MACHINES

### Panasonic FAX MACHINE WITH PAPER CUTTER, SPEAKERPHONE AND ALL DIGITAL ANSWERING MACHINE

Panasonic line of fully featured fax machines start with this compact model which includes 64 level grayscale, super thermal paper compatible, paper curl reduction, 164' paper roll capacity, 15 page document feeder, distinctive ring, delayed transmission, paper save mode, telephone directory with alpha-search, 12 station one-touch with 28 station speed dialing, and much more. All for just .

**$349**

Model
KX-F750
#1944282

### Panasonic PLAIN PAPER FAX MACHINE WITH 20 PAGE MEMORY

The ultimate plain paper fax from Panasonic features a jumbo LCD display, 70 page paper cassette, adjustable letter/legal tray, 32 level halftones, polling, activity reporting, 20 page document feeder, broadcasting to 128 locations, fax transfer, enlargement and reduction copier functions, fax/tel switch, 28-station one-touch dialer, 100-station speed dialer, telephone directory with alpha-search, and much more! Now just...

**$699**

Model
KX-F3000
#1850626

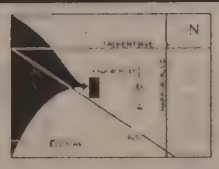
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

FRY'S ELECTRONICS

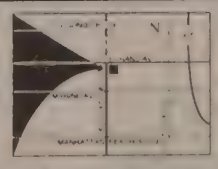
Prices Good Through March 28, 1995

Limit Rights Reserved
Not responsible for typographical errors

**STORE HOURS**
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

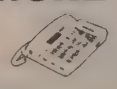
DISCOVER, VISA AND MASTERCARD ACCEPTED

# THINK FRY'S FIRST FOR HOME OFFICE SERVICE, SELECTION & SAVINGS

## SPEAKERPHONES

BELL Phones BY NORTHWESTERN BELL PHONES

### SPEAKERPHONE WITH 13 NUMBER MEMORY



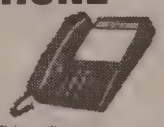
The convenience of a handsfree speakerphone allows you to do other tasks while having a conversation on the phone. Features include 13 number memory, auto redial, mute, flash, and more. An excellent addition to any home or office at only...

**$19.99**

Model 4350
#1917518

SONY.

### SPEAKERPHONE WITH 32 NUMBER MEMORY



From the leader in cordless phone technology comes a new line of feature phones. This unit has a crystal clear speakerphone, 32 number memory and more!

**$49.95**

Model IT-D100
#1516878

Panasonic

### LCD READOUT SPEAKERPHONE

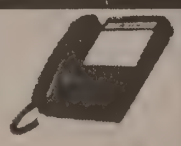
This outstanding value from Panasonic offers a 12-digit LCD readout for phone number, clock, call timer (minutes & seconds), and operating modes. Perfect for the home or office at only..

**$69.95**

Model KX-T2365
#163665

SONY.

### TWO LINE FEATURE PHONE WITH SPEAKERPHONE



Phones with 2-line operation are relatively common, but this phone offers a distinctive ring for each line! The LCD indicator will tell you the number dialed and the time. Now only..

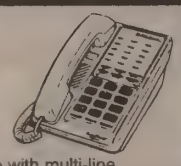
**$79.95**

Model IT-D250
#1516904

## MULTI-LINE PHONES

BELL Phones BY NORTHWESTERN BELL PHONES

### TWO LINE PHONE



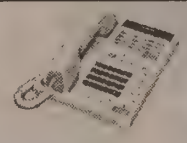
Perfect for the home office with multi-line needs, this 2-line phone from Northwestern Bell features line-in-use LEDs, 3-way conferencing, 15 number memory, hold, flash, pause, and ringer controls. An excellent value at...

**$39.99**

Model Easy Touch 2202
#1890905

Panasonic

### TWO LINE PHONE



A two line phone doesn't have to cost a fortune. Panasonic has the low cost answer for you. This unit has a convenient auto dialer, conference calling and much more!

**$69.95**

Model KX-T3110
#1505313

Panasonic

### TWO LINE SPEAKERPHONE WITH LCD DISPLAY

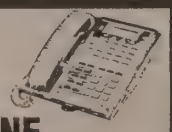
From Panasonic comes this fully featured 2-line speakerphone with LCD display, 3-way conference call, volume control for speaker and handset, 24-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only...

**$89.95**

Model KX-T3175
#1745122

AT&T

### THREE LINE SPEAKERPHONE



AT&T's multi-functional centrex compatible 3-line speaker -phone comes equipped with page, intercom, 3-way conference, LCD display, 40 number memory, auto line selection, hold, do not disturb function, auto-redial, mute, programmable pause, call transfer, flash, seperate ringer controls, and more, all for only.....

**$179.95**

Model 843
#1853892

## ALL DIGITAL ANSWERING MACHINES

AT&T

### ALL DIGITAL ANSWERING MACHINE

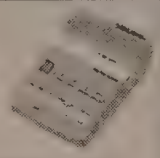
This AT&T answering system utilizes tapeless digital technology to ensure consistent recording quality over the life of the system. The convenience of new message playback, outgoing message bypass, remote system turn on or off and remote message recording makes this an excellent value at only...

**$59.95**

Model 1710
#1853906

BELL Phones BY NORTHWESTERN BELL PHONES

### ALL DIGITAL ANSWERING MACHINE WITH TIME DAY STAMP & 13 MINUTE CAPACITY



This fully featured all digital answering machine from Northwestern Bell comes equipped with Time/Day Stamp, Programmable Security, Selective Skip or Erase, Call Screen, Extension Pickup, Auto Disconnect, Multiple Memo Record, Toll Saver, VOX, 13-Minute Capacity, Remote Access, and much more! An incredible value at just...

**$49.99**

Model 700
#1964820

GENERAL ELECTRIC

### ALL DIGITAL ANSWERING MACHINE WITH THREE MAIL BOXES

With three mailboxes to choose from, members of the household can have messages stored for them in their own mailbox! The all digital capability eliminates the need for moving parts and allows for instant playback of incoming messages-no need to wait for a tape to rewind or fast forward! Other features include voice time/day stamp, two outgoing messages, digital counter, selective message erase and much more for only...

**$79.95**

Model 2-9876
#1839261

AT&T

### 10 CHANNEL CORDLESS SPEAKERPHONE WITH 26 MINUTE CAPACITY & ALL DIGITAL ANSWERING MACHINE

From AT&T the leaders in telecommunication technology comes this state-of-the-art 10 channel cordless speakerphone with 26 minute capacity All Digital Answering Machine. With features that include 2-Way Page and Intercom, Hold, Last Number Redial, Time/Day Stamp, Multiple Outgoing Announcements, Voice Prompts, Digital LED Message Display, Call Intercept, Call Screening, and much more, AT&T has developed an invaluable addition to any home or office for just

**$219.95**

Model 5650 #1919543

## 900 MHz CORDLESS PHONES

uniden

### 40 CHANNEL 900MHz CORDLESS PHONE

Uniden's latest 900MHz cordless phone gives you unparalleled range and performance along with premium features that include 40 channel selection, call monitor, 2-way/hands-free intercom, 10 number memory, mute, last number redial, flash and much more, all for just....

**$189.95**

Model EXP-901
#1965005

GENERAL ELECTRIC

### 100 CHANNEL AUTO SCAN 900 MHz CORDLESS PHONE

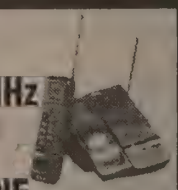
By combining 100 channel auto scan (which allows the phone to lock-on-to the channel that is getting the clearest signal) and 900 MHz crystal clear technology (for improved clarity and extended range), GE has developed the ultimate cordless phone! Other features include 10 number memory, page/find from base to handset, handset volume control, distinctive ring, and more. An excellent value at....

**$179.95**

Model 2-9910
#1923425

AT&T

### DIGITAL 900MHz DUAL KEYPAD CORDLESS SPEAKERPHONE



AT&T, the leader in digital telephone technology once again leads the way into the future with the introduction of this 900MHz cordless phone. By operating at the 900 MHz frequency range rather than the conventional 46 to 49 MHz range, this AT&T cordless phone will provide clearer transmission with less noise and interference from other electronic devices, as well as extended range performance! Features include 10 number memory, mute, hold, flash, last number redial, one-way paging, out-of-range-indicator, digital voice encryption, and much more for only..

**$249.95**

Model 9120
#1853261

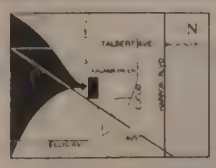
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

FRY'S ELECTRONICS

Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

**STORE HOURS**
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM




**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED

# EXPERIENCE THE REVOLUTION OF

# DIGITAL TV

- LASER DISC QUALITY VIDEO
- CD QUALITY DIGITAL AUDIO
- OVER 150 CHANNELS OF ENTERTAINMENT

RCA

DSS™ DIGITAL SATELLITE SYSTEM

**HURRY, SUPPLIES ARE VERY LIMITED!!!**

DIRECTV

## JUST A SAMPLE OF WHAT'S AVAILABLE!

ESPN, TNT, C-SPAN, CARTOON NETWORK, TRIO, NBC, TNN, CNN, COURT TV, The Disney Channel, USA NETWORK, CNN, E!, TRAVEL CHANNEL, A&E, DISCOVERY, MIRAMAX, UNIVERSAL, TRISTAR PICTURES, C-SPAN2, WALT DISNEY PICTURES

USSB

Multi Channel HBO, MTV MUSIC TELEVISION, SHOWTIME, SHOWTIME 2, VH1, THE MOVIE CHANNEL, Multi Channel CINEMAX, COMEDY CENTRAL, ALL NEWS, LIFETIME, FLIX, NICK NITE

### USSB OFFERS

5 HBO CHANNELS
3 SHOWTIME CHANNELS
2 "THE MOVIE" CHANNELS
3 CINEMAX CHANNELS
AND MORE

## RCA DIGITAL SATELLITE SYSTEM (DSS) DISH AND RECEIVER

Enjoy over 150 channels of top-notch entertainment with the crystal, digital clarity of the new RCA DSS system. CD quality sound and over 400 lines of video resolution, provide an incredible entertainment experience. Let Fry's and RCA help you drive on the Information Superhighway!!!

LIMITED QUANTITIES

MODEL DS-1120WR
#1942578

**$698**

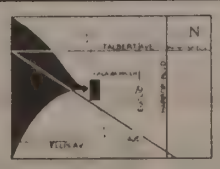
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!®

FRY'S ELECTRONICS

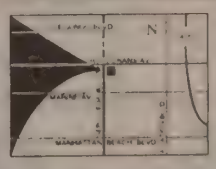
Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

**STORE HOURS**
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED

# LET'S MAKE A DEAL!!!!

## ONE OF A KIND ITEMS OPEN BOXES, UN-USED

### NOTEBOOKS:

AST PREMIUM EXEC 386SX/25C 4/80 . . . . . **$799**
AST ADVANTAGE EXPLORER 486SX/25 4/120 . . . . . **$799**
AST ADVANTAGE EXPLORER 486SX/25 4/170 . . . . . **$899**
AST POWER EXEC "SE" 4/25 REM HD 4/200 . . . . . **$1199**
AST COLOR PLUS 486 4/200. . . **$2199**
AST COLOR PLUS 486SL/33 REM HD/ACTIVE 8/343 . . . . . **$2699**
AST ASCENTIA DX/4 75 COLOR ACTIVE 10.4" REMOVABLE HD8/510 . . **$3995**

COMPAQ LTE LITE 386SX-25/ACTIVE B&W 4/80. . . . . **$799**
COMPAQ LTE LITE 386SX-25/ACTIVE B&W 4/120. . . . . **$999**
COMPAQ CONTURA 4/25C 4/120 . . . . . **$1299**

TI TRAVELMATE 4000E 486SX-25 COLOR 4/120 . . . . . **$1099**
TI TRAVELMATE 4000E 486DX-2 50 ACTIVE CLR 4/200 . . . . . **$2199**
TI TRAVELMATE 4000E 486DX-4 75 ACTIVE CLR 4/340. . . . . **$2499**
TI TRAVELMATE 4000M 486SX-2 50 COLOR 4/200 . . . . . **$2299**

TOSHIBA T1900 486SX-20 4/120. **$899**
TOSHIBA T1950 486DX-2 40MHZ 4/120 . . . . . **$1099**
TOSHIBA T1910CS 486SX-33 4/200. . . . . **$1399**

### DESKTOPS:

TOSHIBA T8500 386 BUILT-IN SCSI 4/0 . . . . . **$299**
AST PREMIUM II 486SX-20 MODEL 3V 4/0 . . . . . **$499**
MAC IISI 68030-25MHZ 3/40 . . . **$599**
MAC LC520 - BUILT IN MONITOR/CD 5/80 . . . . . **$999**

### MONITORS

RADIUS PIVOT - FULL PAGE 15" . . . **$499**
RADIUS COLOR PIVOT - FULL PAGE 15" . . . . . **$699**

### PRINTERS

STAR XR-1520 PRINTER 9-PIN/132 COLUMN/420 CPS . . . . . **$199**
CANON BJC 600 - COLOR/ 600 DPI . . . . . **$399**

## TOSHIBA

T4700CT*
486DX-2 50 COLOR ACTIVE
8MB/320MB . . . . . **$2799**

T4900CT
NTEL 75MHZ MOBILE PENTIUM
10.4 ACTIVE MATRIX
8MB/810MB **.CALL FOR BEST PRICE**

T4800CT*
486DX-4 75MHZ LOW POWER CONSUMPTION 8MB/500MB .**$3799**

T1910*
486SX-33 COLOR VGA 4/200 **$1199**

T1910CS*
486SX-33 COLOR VGA 4/200 **$1499**

T1960CS*
486DX-2 50/ACTIVE COLOR VGA 4/200 . . . . . **$1849**

T1960CT
486DX-2 50/ACTIVE COLOR
4/200 . . . . . **$2399**
4/320 . . . . . **$2599**

T3400CT
486SX-33/Active COLOR
4.4LBS. 4/250 . . . . . **$1999**

T3600CT*
486DX-2 50MHZ ACTIVE COLOR
8/250 . . . . . **$2699**

T4700CS*
486DX-2 50 BUILT-IN SOUND
8/200 . . . . . **$2399**

T4800CT
486DX-4 75MHZ ACTIVE
COLOR/SOUND 8/500 . . . . . **$4199**

## APPLE

*MOST COMPETITIVE RESELLER IN SOUTHERN CALIFORNIA*

### POWERBOOKS:

150 4/120 . . . . . $1299
520 4/160 . . . . . $1749
520C 4/160 . . . . . $2249
520C 12/320/MOD . . . . . $2999
540C 4/320 . . . . . $3249
540C 20/500/MOD . . . . . $4499

### POWERMACS:

6100/60 8/250/CD . . . . . $1549
6100/66 8/350/CD . . . . . $1869
6100/66 16/500/DOS . . . . . $2599
7100/66 8/500/CD . . . . . $2149
7100/66 AV16/500/CD . . . . . $2749
7100/808/700/CD . . . . . $2799
8100/8016/1 GIG/CD . . . . . $3599
8100/10016/700/CD . . . . . $3899
8100/100 AV16/1 GIG/CD . . . . . $4399
8100/11016/2GIG/CD . . . . . $5999
APPLE 300E PLUS CD . . . . . $299

## SONY

15SF . . . . . $439
17SF . . . . . $859
17SE1 . . . . . $999
2036* . . . . . $1399
20SE1 . . . . . $1799

## NEC

XE 15" . . . . . $559
XE 17" . . . . . $949

LA COMPUTER CENTER

**(310) 479-0999 • FAX (310) 312-9041**

**12002 Pico Blvd.**

*(Take the 10 West, Exit Bundy, turn right on Pico, 1 block on the right)*

Prices subject to change without notice. All prices are cash discounted.

# Attend the Hottest Computer Event in Southern California!

The Business Computer Show™ + HOME = IDBMA, Inc.'s INTERNATIONAL

## March 28-30, 1995

**Anaheim Convention Center • Anaheim, California**

Find deals on computer and office products in the Home Office Pavilion

Get your hands on worldwide messaging at the Internet Cafe

Play the hottest CD-ROM games in the Entertainment Software Pavilion

See the latest Apple, DOS, and UNIX database software

Find business computer solutions for every industry

**Call 1-800-767-SHOW Today!**

***Plus ... Mobile and Wireless Computing • Client/Servers and LANS • Workstations • PCs • RISC Systems • Multimedia Products • Imaging Solutions ... and much more!***

The Business Computer Show™ + HOME Office = IDBMA, Inc.'s INTERNATIONAL Spectrum

**$10.00 OFF**

**3-DAY EXHIBITION PASS**

Admission $20.00
($10.00 with this coupon)
MicroTimes

ANAHEIM CONVENTION CENTER
Show Hours: Tuesday and Wednesday, March 28 - 29: 10:00 a.m. - 5:00 p.m.
Thursday, March 30: 10:00 a.m. - 3:00 p.m.

**Stop by the Job Match Center and find a new job or new employee on-site!**

ALL REGISTERED TRADEMARKS AND TRADEMARKS ARE OWNED BY THEIR RESPECTIVE COMPANIES

HEWLETT PACKARD SCO UNISYS Data General ... and many more!

# High Quality, Low Prices, Is Our Pro!

## ADVANCE PRO TECHNOLOGY


133 PUENTE AVE.
CITY OF INDUSTRY,CA 91746
TEL: (818)336-8960
FAX: (818)336-3221


Mon. - Fri. 9:00 am - 6:00 pm
Sat. 10:00 am - 4:00 pm
Sun. - by appointment

### PENTIUM PCI LOCAL BUS SCSI MASTER

| | |
|---|---|
| PENTIUM 100MHz | $3,058 |
| PENTIUM 90MHz | $988 |
| PENTIUM 75MHz | $2,678 |

- PENTIUM PCI LOCAL BUS M/B
- INTEL PENTIUM CPU w/ZIF SOCKET
- 256K CACHE MEMORY
- 16MB RAM (EXP TO 128MB)
- CPU COOLING FAN & HEATSINK
- TEAC 1.2 MB & 1.44 MB DUAL FDD
- 1 GIG SCSI III 8MS HDD
- ADAPTEC 2940W PCI FAST SCSI III BUSMASTER
- 64 BIT ATI MACH PCI W/4MB VRAM
- HI-SPEED I/O (16550)
- DELUXE FULL TOWER CASE
- 300 WATTS POWER SUPPLY (UL)
- MICROSOFT DOS 6.22 & WINDOW 3.11
- FOCUS FK 9000 KEYBOARD
- MICROSOFT MOUSE
- MONITOR NOT INCLUDED

### VESA LOCAL BUS SCSI MASTER

| | |
|---|---|
| INTEL 486DX4-100 | $1,788 |
| INTEL 486DX2-66 | $1,598 |
| AMD 486DX2-80 | $1,588 |
| AMD 486DX2-66 | $1,558 |

- INTEL PENTIUM OVERDRIVE READY
- 4MB RAM (EXP TO 128MB)
- 256K CACHE MEMORY
- CPU COOLING FAN & HEATSINK
- TEAC 1.2 MB & 1.44 MB FDD
- 540MB SCSI HARD DRIVE
- 32 BIT VLB ADAPTEC 2842 FAST SCSI II
- 32 BIT VLB DIAMOND STEALTH 64 w/2MB VRAM (UP TO 4 MB)
- 15" SVGA MTR 1280 X 1024 .28 D.P. N-I W/DIGITAL CONTROL EPA ENERGY
- HI-SPEED I/O (16550)
- DELUXE FULL TOWER w/ 2 COOLING FANS
- 250 WATTS POWER SUPPLY
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

### VESA LOCAL BUS MULTIMEDIA STANDARD

SPECIAL

| | |
|---|---|
| INTEL 486DX4-100 | $1,338 |
| INTEL 486DX2-66 | $1,078 |
| AMD 486DX2-66 | $1,078 |
| INTEL 486DX-33 | $1,048 |

- INTEL PENTIUM OVERDRIVE READY
- 4MB RAM 70NS, 256K CACHE
- 1.44 MB FDD
- CPU COOLING FAN & HEATSINK
- 540MB IDE HARD DRIVE
- 32 BIT VLB IDE CONTROLLER
- 32 BIT VLB GRAPHICS ACCELERATOR w/1 MB
- PANASONIC / ACER / SONY (2X) CD-ROM
- SOUND BLASTER 16 COMPATIBLE
- 140W HI-FI STEREO SPEAKER
- 14" SVGA MTR 1024 X 768 .28D.P. N-I
- DELUXE MID TOWER CASE
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

- MS-DOS 6.22 & WINDOWS 3.11 w/MANUAL.....ADD $80
- MICROSOFT FAMILY KIT.....ADD $65
  - MS-ENCARTA '95, MS-WORKS V3.0
  - MS-MONEY V3.0, DANGEROUS CREATURE
  - MS-GOLF, ENTERTAINMENT PACK (8 GAMES)

### PENTIUM PCI MULTIMEDIA STANDARD

| | |
|---|---|
| PENTIUM 100MHz | $1,978 |
| PENTIUM 90MHz | $1,898 |
| PENTIUM 75MHz | $1,638 |

- INTEL PENTIUM CPU w/ZIF SOCKET, 256K CACHE
- 8MB RAM 70NS(EXP TO 128MB)
- CPU COOLING FAN & HEATSINK
- 1.2MB AND 1.44 MB FDD
- 540 MB IDE HARD DRIVE
- PCI ENHANCED IDE CONTROLLER
- 2 SERIAL, 1 PARALLEL, 1 GAME
- PCI ULTRA PRO MACH32 SVGA w/1 MB (UP TO 2 MB)
- PANASONIC / ACER / SONY (2X) CD-ROM
- SOUND BLASTER 16 COMPATIBLE
- 140W HI-FI STEREO SPEAKERS
- 15" SVGA MTR 1280 x 1024.28D.P. N-1
- DELUXE MID TOWER CASE
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

- MS-DOS 6.22 & WINDOWS 3.11 w/MANUAL.....ADD $80
- MICROSOFT FAMILY KIT.....ADD $65
  - MS-ENCARTA '95, MS-WORKS V3.0
  - MS-MONEY V3.0, DANGEROUS CREATURE
  - MS-GOLF, ENTERTAINMENT PACK (8 GAMES)

### PENTIUM PCI SCSI STANDARD

| | |
|---|---|
| PENTIUM 100MHz | Call |
| PENTIUM 90MHz | $2,448 |
| PENTIUM 66 MHz | $2,268 |
| PENTIUM 60MHz | $2,238 |

- PENTIUM PCI LOCAL BUS M/B
- INTEL PENTIUM CPU w/ZIP SOCKET
- 256K CACHE MEMORY
- 8MB RAM (EXP TO 128MB)
- CPU COOLING FAN & HEATSINK
- 1.2 MB & 1.44 MB FDD
- 540MB SCSI II HARD DRIVE
- PCI SCSI II CONTROLLER
- 2 SERIAL, 1 PARALLEL, 1 GAME
- PCI DIAMOND STEALTH 64 BIT w/2 MB VRAM (UP TO 4MB)
- 17" SVGA MTR 1280 x 1024 .28D.P. N-I w/ DIGITAL CONTROL EPA ENERGY
- DELUXE FULL TOWER CASE
- 250 WATTS POWER SUPPLY
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

### VESA LOCAL BUS STANDARD

SPECIAL

| | | | |
|---|---|---|---|
| INTEL 486DX4-100 | $1,048 | AMD 486DX2-80 | $898 |
| INTEL 486DX2-66 | $888 | AMD 486DX2-66 | $888 |
| INTEL 486DX-33 | $848 | | |

- INTEL PENTIUM OVERDRIVE READY
- 4MB RAM 70NS
- ZIF SOCKET
- 256K CACHE MEMORY
- 1.44 MB FDD
- GREEN MOTHERBOARD
- CPU COOLING FAN & HEATSINK
- 540MB IDE HARD DRIVE
- 32 BIT VLB WINBOND IDE CTLR w/2S-P-G
- 32 BIT VLB GRAPHICS ACCELERATOR w/1 MB
- 14" SVGA MTR 1024 x 768 .28D.P. N-I
- DELUXE MID TOWER CASE
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

- 40W SPEAKER.....ADD $24
- 120W SPEAKER.....ADD$42
- 140W SPEAKER.....ADD$45
- MICROSOFT DOS 6.22 & WINDOWS 3.11 w/ MANUAL.....ADD $80

### PENTIUM PCI LOCAL BUS STANDARD

SPECIAL

| | |
|---|---|
| PENTIUM 100MHz | $1,818 |
| PENTIUM 90MHz | $1,768 |
| PENTIUM 75MHz | $1,478 |

- PENTIUM PCI LOCAL BUS M/B
- INTEL PENTIUM CPU w/ZIF SOCKET
- 256 CACHE MEMORY
- 8MB RAM 70NS (EXP TO 128MB)
- CPU COOLING FAN & HEATSINK
- 1.2 MB & 1.44 MB FDD
- 540MB IDE HARD DRIVE
- PCI ENHANCED IDE CONTROLLER
- 2 SERIAL, 1 PARALLEL, 1 GAME
- PCI ULTRA PRO SVGA w/ 1MB (UP TO 2MB)
- 15" SVGA MTR 1280 x 1024 .28D.P. N-I
- DELUXE MID TOWER CASE
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

* MULTI-MEDIA UPGRADE:

- MULTI-MEDIA KIT-DUAL SPEED SONY / ACER/ PANASONIC CD ROM 16 BIT SOUND BLASTER COMPATIBLE SOUND CARD ADD $158
- NEW! MULTI-MEDIA KIT-TOSHIBA 3501B 195MS QUAD SPEED CD ROM • SOUND BLASTER 16 SCSI II SOUND CARD ADD $388
- MULTI-MEDIA KIT-NEC TRI SPEED 510 195MS CD ROM • SOUND BLASTER 16 SCSI II SOUND CARD ADD $298
- NEW! MULTI-MEDIA KIT-TEAC SUPER QUAD (4X) CD ROM • SOUND BLASTER 16 BIT SOUND CARD ADD $258

### PRINTERS & MONITORS

| | |
|---|---|
| **•HEWLETT PACKARD** | |
| HP DESK 540 | $290 |
| HP DESKJET 560C | $465 |
| HP OFFICE JET | $725 |
| HP LASERJET 4L/4ML | $636/$965 |
| HP LASERJET 4P/4M | $938/1195 |
| HP LASERJET 4 PLUS | $1385 |
| HP SCANNER II P/ IIIP | CALL |
| HP SCANNER II CX | $915 |
| **•CANON:** | |
| CANON BJ-200E | $235 |
| CANON BJ-600E / BJ-4000 | $475 / $415 |
| CANON BJ-10SX | CALL |
| **•EPSON:** | |
| EPSON AP- 2250 / 5000+ | $110 / $240 |
| EPSON STYLUS COLOR | $515 |
| EPSON AL-1100 /1400 | $405/ $675 |
| EPSON ACTION-1500 | $485 |
| EPSON ACTION-1600 | $785 |
| **•PANASONIC** | |
| KX-P2130 / KX-P2135 | $205/$240 |
| KX-P3123 / SP-100 | $249/$385 |
| KX-4400/4410 | $435/$455 |
| •TEXAS INSTRUMENT-COLOR INK | $365 |
| •SHARP JX-9400 | CALL |
| •CITIZEN COLOR II PRINTER | CALL |
| •VIEWSONIC / MAG MONITOR | CALL |
| •NEC-3FGE / 4 FGE MONITOR | CALL |
| •SONY 15" FS MONITOR | CALL |

TERMS:
- 30-DAY MONEY BACK GUARANTEE W/10% RESTOCKING FEE.
- ALL PRICES ARE C.O.D. CASH.
- PRICE & CONFIGURATION SUBJECT TO CHANGE WITHOUT NOTICE.
- ALL RETURNS MUST BE AS-NEW AND SEND PREPAID, WITH RMA NUMBER.
- WE ACCEPT VISA, MC & AX.
- ADD SALES TAX NO EXCEPTION.
- ONE YEAR WARRANTY ON PARTS.
- THREE YEARS FREE LABOR WARRANTY.

CFP Preview *continued from page 32*

card? On the one hand, national ID cards constitute a very serious threat to personal privacy. On the other, it's going to be impossible to automate government service and transactions in general without some form of identification which serves as an interface to networks.

This tutorial will review the history, details, and status of proposals for a national identification card for every American, and then will explore the conflicting ethical issues swirling around the use of these cards.

### The CFP Game Room

*-Russell Brand, Senior Computer Scientist, Reasoning Systems, and friends*

Come discover the meaning of some of the terminology used at the conference and in the press, but in an informal, playful setting. Russell Brand and friends will be your guide in this den of iniquity filled with anonymous remailers, digital personas, threats to your security, and other questionable activities. The morning session will stress technology games.

## 2:00–5:00 pm

### Intellectual Property for the Information Age (MCLE Credit)

*-Lance Rose, Attorney and Author of* Syslaw

Recent assertions of intellectual property rights—particularly copyrights, patents, trademarks—in the computer and telecommunications industries have occupied the headlines and generated widespread controversy about whether these rights are improperly throttling individual freedoms.

Intelligent discussion of the issues requires an understanding of these rights. This tutorial examines the scope and nature of intellectual property protection under current law and how this protection has been applied recently in connection with computer and telecommunications technologies.

### Everything You Need to Know to Argue About Cryptography

*-Matt Blaze, AT&T Bell Laboratories*

This tutorial will give an overview of cryptography and its relationship to privacy in modern communications networks. Topics will include: a brief history of secret writing, conventional cryptosystems, public key cryptography, applications of cryptography, threats and risks, and the technical aspects of the cryptography public policy debate.

### Inside the World of Law Enforcement

*-Kent Walker, Assistant United States Attorney, U.S. Department of Justice and cofounder, Silicon Valley High-Technology Crime Task Force*

What kinds of high-tech crime do the police investigate? How do they hear about it? How do prosecutors and agents investigate it? What are the limits on their ability to gather information? And in what new directions are they heading?

This tutorial will discuss these questions, and give you a chance to ask about specific law enforcement priorities or practices that concern you.

### Digital Activism

*-David Smith, President, Austin, Texas Electronic Frontier Foundation*

This tutorial will focus on the methodology of activism, the nuts and bolts. The tutorial has been designed to push the envelope of


# Active Business Computer

TEL: (310) 477-7280

**486SLC2-66MHZ**
Mini Tower Case
4MB RAM
270MB HD
1.44 FD
IDE W/IO
1MB SVGA Card
14" SVGA Monitor
Keyboard, Mouse
**$845**

DOS +$45 Windows +$55

**AMD 486DX2-80MHZ**
Mini Tower Case
4MB RAM
420MB HD
1.44 FD
VESA IDE W/IO
VESA 1MB SVGA Card
14" SVGA Monitor
Keyboard, Mouse
**$1055**

Windows For Workgroup +$75

**PENTIUM 90MHZ**
Mini-Mid Tower Case
8MB RAM
560MB HD
1.44 FD
PCI IDE, IO Interface
1MB PCI SVGA Card
14" SVGA Monitor
Keyboard, Mouse
**$1899**

| | | | | | |
|---|---|---|---|---|---|
| 1.2 Mitsumi Floppy | $42 | Conner 270MB HD | $165 | 512KB ISA SVGA Card | $40 |
| 1.4 Mitsumi Floppy | $32 | Conner 420MB HD | $185 | 1MB ISA SVGA Card | $65 |
| 1.2 Teac Floppy | $47 | Conner 540MB HD | $215 | 1MB VESA SVGA | $79 |
| 1.4 Teac Floppy | $37 | Samsung 560MB HD | $195 | 350MB Tape Backup | $179 |

PRICE AND AVAILIBILITY ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL PRICES ARE CASH DISCOUNTED

SERVICES ARE AVAILABLE FOR IBM COMPATIBLE AND LAN

11919 SANTA MONICA BLVD. W. LOS ANGELES, CA 90025

## MACRO SYSTEMS

| | |
|---|---|
| PENTIUM 90MHz PCI | $1799 |
| PENTIUM 66MHz PCI | $1399 |
| VLB 486DX2/66MHz | $999 |
| VLB 486DX/33MHz | $949 |

256K Cache
4MB RAM
420MB Hard Drive
1.44MB Floppy Drive
PCI or VLB IDE Controller
2 Serial/1 Parallel/1 Game Port
PCI or VESA 1MB SVGA Video Card
14" SVGA Monitor
Tower w/230W Power Supply
101 Enhanced Keyboard
Serial Mouse

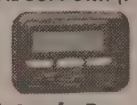
SOUTH COUNTY'S BEST!

# MACRO Technologies

23151 VERDUGO, SUITE 102 • LAGUNA HILLS, CA 92653
TEL: (714) 580-1822 • FAX: (714) 770-4950
TECHNICAL SUPPORT: (714) 859-1014

Pagers & Cellular Phones Now Available!

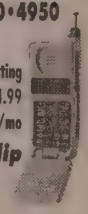
LA CELLULAR · AIRTOUCH

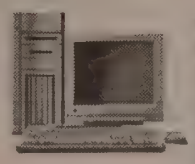


Motorola Pagers $49.95!

Service Starting at $34.99 p/mo

Motorola Flip $99





VISA · MasterCard · Novell Certified NetWare Engineer

BAD CREDIT? NO PROBLEM!

**CONSULTING, SALES, SERVICE, TRAINING & REPAIRS**
*Financing & Leasing Available*

## SPECIAL!

| | |
|---|---|
| 560MB IDE HDD | $209 |
| 420MB IDE HDD | $185 |
| 4862-66MHz w/CPU | $149 |
| 4862-50MHz w/CPU | $99 |
| CD ROM Double Spd. | $125 |

## MOTHERBOARDS

| | |
|---|---|
| PCI Pentium 90MHz & CPU | $935 |
| PCI Pentium 66MHz & CPU | $749 |
| PCI Pentium 60MHz w/256K & CPU | $689 |
| VESA L/B 486DX4-100MHz w/256K & CPU | $369 |
| VESA L/B 486DX2-80MHz w/256K & CPU | $329 |
| VESA L/B 486DX2-66MHz w/256K & CPU | $299 |
| VESA L/B 486DX-50MHz w/256K & CPU | $339 |
| VESA L/B 486DX2-50MHz w/256K & CPU | $239 |
| VESA L/B 486DX-40MHz w/256K & CPU | $235 |
| VESA L/B 486DX-33MHz w/256K & CPU | $229 |
| VESA 4862-66MHz & CPU | $149 |
| 486DLC-40MHz w/Math Co & CPU | $139 |
| 486SX-25MHz & CPU | $159 |
| ISA 386DX-40MHz & CPU | $105 |

## HARD & FLOPPY DRIVES

| | |
|---|---|
| 1.2FDD | $52 |
| 1.44FDD | $42 |
| 270MB IDE HDD | $165 |
| 420MB IDE HDD | $189 |
| 540MB IDE HDD | $229 |
| 820MB IDE HDD | $329 |
| 1.0GB IDE HDD | $439 |
| 290MB SCSI HDD | $239 |
| 540MB SCSI HDD | $299 |
| 1.0GB SCSI HDD | $569 |
| 1.7GB SCSI HDD | $949 |

## VIDEO CARDS

| | |
|---|---|
| MGP | $15 |
| SVGA 256K 16-Bit | $32 |
| SVGA 1MB 16-Bit | $62 |
| SVGA 1MB Windows Accelerator Card | $67 |
| Diamond Stealth 24-Bit 1MB VLB | $157 |
| Diamond Viper VLB 2MB VRAM SVGA | $339 |
| Diamond Stealth PCI 1MB | $155 |
| VESA Local Bus 1MB SVGA S3 Chip | $79 |
| Diamond Viper PCI 2MB VRAM | $299 |
| Diamond Stealth 64 PCI 4MB VRAM | $495 |

**CALL FOR ADDITIONAL OPTIONS!**

## CONTROLLERS

| | |
|---|---|
| IDE w/ I/O (2S/1P/1G) | $23 |
| IDE 2FD/2HDD | $18 |
| I/O (2S/1P/1G) | $17 |
| PCI IDE Controller | $29 |
| VESA Local Bus IDE w/I/O Controller | $27 |
| Adaptec 1522 SCSI II Compatible Card Only | $99 |
| Adaptec 1542CK SCSI w/Bus Master & Kit | $279 |
| Adaptec 2742K EISA 32-Bit SCSI w/Kit | $395 |
| Adaptec 2842AK VLB SCSI-2 Controller w/Kit | $259 |
| PCI SCSI-2 Controller | $145 |
| Adaptec 2842 VL SCSI-2 | $289 |
| Adaptec 2940 PCI SCSI-2 PCI | $329 |

## MONITORS

| | |
|---|---|
| 14" SVGA 1024x768, .39dp | $195 |
| 14" SVGA 1024x768, .28dp | $207 |
| 14" SVGA NI 1024x768, .28dp | $235 |
| 15" SVGA NI 1024x768, .28dp | $319 |
| 17" SVGA NI 1024x768, .28dp | $625 |
| MAG 15" SVGA 1280x1024, .28dp | $469 |
| MAG 17" SVGA 1280x1024, .28dp | $669 |
| NEC 4FG 15" SVGA 1280x1024, .28dp | $769 |
| NEC 5FG 17" SVGA 1280x1024, .28dp | $1330 |
| Sony 15SF 15" SVGA .25 Trinitron | $455 |
| Mono 14" Monitor | $95 |
| Mono 14" VGA Monitor | $105 |

**MEMORY AND PRINTER MODULES AVAILABLE!**

## KEYBOARDS

| | |
|---|---|
| 101 Keyboard | $25 |
| Focus 2001 | $37 |
| Focus 9000 | $57 |
| Keytronic KT2000 | $32 |
| Fujitsu 4700 | $41 |
| Maxi Switch 101 | $27 |

## CPU's

| | |
|---|---|
| Intel Pentium 90MHz CPU | $699 |
| Intel Pentium 66MHz CPU | $389 |
| Intel Pentium 60MHz CPU | $349 |
| Intel 486DX2-66MHz CPU | $209 |
| AMD 486DX2-80MHz CPU | $269 |
| AMD 486DX4-100MHz CPU | $299 |

**CALL FOR ADDITIONAL CPU & MEMORY PRICING!**

## MULTIMEDIA

| | |
|---|---|
| 2x Speed CD ROM | $129 |
| 2x Speed SCSI CD ROM | $159 |
| 4x Speed CD ROM | $219 |
| 16 Bit Sound Card | $74 |
| 16 Bit SCSI Sound Card | $109 |
| 25W Powered Speakers | $39 |
| CD ROM Software | CALL |

## MISCELLANEOUS

| | |
|---|---|
| 14.4 Internal Fax Modem | $69 |
| Colorado 250MB | $169 |
| Conner 250MB w/ Tape | $155 |
| Conner 420MB w/ Tape | $185 |
| Microsoft Compatible 3-Button | $17 |
| Microsoft Serial Mouse (NEW!) | $39 |
| Microsoft Trackball Mouse | $49 |

## CHASSIS

| | |
|---|---|
| Desktop AT w/200W | $49 |
| Mini Tower w/200W | $44 |
| Mid Tower w/230W | $65 |
| Full Tower w/230W | $79 |
| Black Color Model Available | CALL |

NOVELL NETWORKS **NOTEBOOKS AVAILABLE!**

# TEL: (714)580-1822

**BUSINESS HOURS:**
**M-F 9:00AM TO 5:30PM**
All prices subject to change without notice.

# DMS-MEMORY UPGRADE SPECIALISTS! 714/ 821-3354

## STANDARD SIMMS

| | | |
|---|---|---|
| 1x3-70 | | $38.50 |
| 1x3-70 | IBM/OEM | 35 |
| 1x3-60 | | 39 |
| 1x9-60 | | 42 |
| 1x9-70 | | 39.50 |
| 1x9-80 | | 39 |
| 1x8-70 | | 38 |
| 1x9-100 | | 31 |
| 4x9-60 | | 149 |
| 4x9-70 | | 142 |
| 4x9-80 | | 129 |

## LOGIC 72-PIN SIMMS

| | | |
|---|---|---|
| 1x36-70 | Logic Parity | $152 |
| 2x36-70 | Logic Parity | 319 |
| 4x36-70 | Logic Parity | 475 |

## PARITY 72-PIN SIMMS

| | | |
|---|---|---|
| 256x36-70 | (1MB) | $55 |
| 512x36-70 | (2MB) | 92 |
| 1x36-70 | (4MB) | 162 |
| 1x36-60 | (4MB) | 167 |
| 2x36-70 | (8MB) | 335 |
| 2x36-60 | (8MB) | 339 |
| 4x36-70 | (16MB) | 529 |
| 4x36-60 | (16MB) | 539 |
| 8x36-70 | (32MB) | 1095 |
| 8x36-60 | (32MB) | 1109 |
| 16x36-70 | (64MB) | 2219 |
| 16x36-60 | (64MB) | 2279 |

## NON-PARITY 72-PIN SIMMS

| | | |
|---|---|---|
| 1x32-70 | (4MB) | $152 |
| 1x32-60 | (4MB) | 155 |
| 2x32-70 | (8MB) | 305 |
| 2x32-60 | (8MB) | 309 |
| 4x32-70 | (16MB) | 465 |
| 4x32-60 | (16MB) | 479 |
| 8x32-70 | (32MB) | 925 |
| 8x32-60 | (32MB) | 935 |
| 16x32-70 | (64MB) | 1910 |
| 16x32-60 | (64MB) | 1945 |

## DESKTOP MEMORY

| | 4MB | 8MB | 16MB |
|---|---|---|---|
| **APPLE:** | | | |
| QUADRA 700, 900, 950 | 159 | | 519 |
| QUADRA 800, 840AV | 159 | 305 | 519 |
| QUADRA 605, 610, 650 | 155 | | 519 |
| CENTRIS 610, 650, 660 AV | 155 | 289 | 519 |
| PERFORMA 450, 460, 466, 467, 475, 550, 600 | 155 | 289 | 519 |
| **AST:** | | | |
| PREMIA 4/33, 336, 50d, 66d | 169 | 339 | 539 |
| ADVANTAGE I PLUS 486 SERIES | 155 | 305 | 479 |
| ADVANTAGE I PRO 486/DX33, SX25 | 155 | 305 | 479 |
| BRAVO 486LP, LCII, LC SERIES | 155 | 305 | 479 |
| PREMIUM II-SX, SX16, SX20 | 155 | 305 | 479 |
| PREMIUM 486 (ALL) | | CALL | |
| **COMPAQ:** | | | |
| PROLINEA MT 4/33 4/66, 4/50, 4/66 | 165 | 329 | 539 |
| PROSIGNIA 486/33 486DX2/66 | 165 | 329 | 539 |
| PRESARIO 800L 600, 400 SERIES | 165 | 329 | 539 |
| PROLIANT (ALL) | 165 | 329 | 539 |
| DESKPRO (ALL) | | CALL | |
| **DELL:** | | | |
| PRECISION 486 | 155 | 289 | 479 |
| **IBM:** | | | |
| PS/VALUEPOINT 486(ALL) | 165 | 335 | 539 |
| 433SX/SI, 433DX/SI | 165 | 335 | 539 |
| PREMIER PS/2 76, 77, 56 | 165 | 335 | 539 |
| 57 ULTIMEDIA M77 | 165 | 335 | 539 |
| PS/1 WILLOW(ALL) | 165 | 335 | 539 |
| PS/1 CONSULTANT | 165 | 335 | 539 |
| PS/1 ESSENTIAL | 165 | 335 | 539 |
| PS/1 ADVISOR | 165 | 335 | 539 |
| PS/2 50, 60, 70, 95XP | 165 | 335 | 539 |
| **ZENITH:** | | | |
| Z486/25E | | CALL | |
| Z-SERVER (ALL) | | CALL | |
| Z-SELECT100 | | CALL | |

## NOTEBOOK MEMORY

| | 4MB | 8MB | 16MB | 32MB |
|---|---|---|---|---|
| **ACER:** | | | | |
| ACERNOTE 750, 735, 769 | 209 | 379 | 675 | |
| **ALTIMA:** | | | | |
| VIRAGE | | 205 | 675 | |
| LSX | 139 | 205 | | |
| NB486 | | 205 | 675 | |
| **AMBRA:** | | | | |
| NC 425SL | 205 | 349 | | |
| N100 | 205 | 379 | 675 | CALL |
| SN SERIES | 205 | | 675 | |
| **APPLE:** | | | | |
| POWERBOOK 520,/C, 540,/C | 205 | 349 | 599 | 1295 |
| POWERBOOK 140, 145B, 170, 180, 160, 165, 180C, 165C | 175 | 299 | 349 | |
| **AST:** | | | | |
| ASENTIA 800/810 | 195 | 379 | 625 | |
| ASENTIA 900N/910N | 205 | 379 | 649 | |
| POWEREXEC 486SL/33 | 195 | | 629 | |
| BRAVO NB/EXPLORER | 195 | | 619 | |
| PEN EXEC (2MB) | 129 | | (4MB)209 | |
| **AT&T:** | | | | |
| AT&T SAFARI 3181 | 209 | 409 | 789 | |
| AT&T SAFARI 3151 | 229 | | | |
| **CANON:** | | | | |
| NOTEJET 486C (BN100) | 195 | 379 | | |
| NOTEJET 486 (BN22) | 195 | 379 | | |
| NOTEJET II (BN32) | 195 | 379 | | |
| INNOVABOOK 10C SUB | 205 | | 675 | |
| INNOVABOOK 150C | 195 | | 629 | |
| INNOVA 486NX | 205 | 379 | | |
| **COMPAL:** | | | | |
| TS3800 | 195 | 385 | 675 | (20MB) |
| **COMPAQ:** | | | | |
| CONCERTO 425/433 | 195 | 379 | 629 | |
| CONTURA 4/25, C, CX | 195 | 389 | 689 | |
| CONTURA 400C, 400CX | 195 | 389 | 689 | |
| LTELITE 4/25, C | 195 | 349 | 695 | |
| AERO | 205 | 349 | 679 | |
| **CTX:** | | | | |
| EZBOOK | 205 | 385 | | |
| **DELL:** | | | | |
| 325N, 325NC (2MB) | 109 | | | |
| NI20, N125 (2MB) | 109 | | | |
| 320SLi, 325SLi (2MB) | 104 | 219 | 395 | |
| 320N+ (2MB) | 109 | 219 | | |
| 212N, 320N (2MB) | 109 | | | |
| LATITUDE 433/C, CX, 425 | 205 | | 679 | |
| LATITUDE XP 4100CX 450C/CX, 475CX | 205 | | 879 | |
| LATITUDE M, MC, MCX | 195 | 389 | 629 | |
| **EPSON:** | | | | |
| ACTION NOTE 500C | 209 | | | |
| ACTION NOTE 650 | 205 | 379 | 595 | |
| ACTION NOTE 700 | 205 | | 849 | |
| ACTION NOTE 4000 | | (6MB)309 | | |
| 4SLC/25,33,4LC2/50 | | (6MB)309 | | |
| NB3S | 209 | | | |
| NBSL 20/25/25C | 209 | 349 | | |
| **EVEREX:** | | | | |
| STEPNOTE | 205 | | 619 | |
| **GATEWAY:** | | | | |
| COLORBOOK | 209 | | 689 | |
| HANDBOOK | 209 | | 689 | |
| NOMAD/NOMAD N | 229 | | 695 | |
| **IBM:** | | | | |
| CL57LSX | 195 | 389 | | |
| PS/NOTE 2618 | 195 | 349 | 585 | |
| PS/NOTE 182, N82, L40SX | 209 | 349 | | |
| THINKPAD 350, 350C | 195 | 349 | 585 | CALL |
| THINKPAD 355, 355C | 195 | 369 | 649 | |
| THINKPAD 360/C/Cs/P | 195 | 369 | 649 | |
| THINKPAD 510/Cs | 195 | 389 | 745 | |
| THINKPAD 500 | 195 | 359 | | |
| THINKPAD 700/C, 720/C | 195 | 349 | | |
| THINKPAD 710T | 209 | 349 | | |
| THINKPAD 730T | 195 | 369 | 649 | |
| THINKPAD 750/C/Cs/P | 209 | 389 | 745 | |
| THINKPAD 755C DX2/4 | 209 | 389 | 745 | |
| 755CS DX2/4 | 209 | 389 | 745 | |
| **MIDWEST MICRO:** | | | | |
| ELITE SOUND BOOK | 215 | 465 | CALL | |
| **NEC:** | | | | |
| ULTRALITE VERSA E/M/V (3.3V) | 199 | 369 | 719 | |
| ULTRALITE III, SL, 25C | 205 | 369 | | |
| ULTRALITE VERSA S-SERIES | 189 | 389 | 649 | |
| **PACKARD BELL:** | | | | |
| STATESMAN | 105 | 179 | | |
| **SAGER:** | | | | |
| NB 83 | | 395 | 695 | 1295 |
| 6500 | 209 | | 695 | |
| 7500 | 209 | 395 | 695 | 1295 |
| **SAMSUNG:** | | | | |
| NOTEMASTER 16/25 | 119(2MB) | 219(4MB) | 339(6MB) | |
| **SHARP:** | | | | |
| 7700/7750/8150 | 205 | | 849 | |
| 8650/8660 | 205 | | 849 | |
| 8700 | 205 | 389 | 649 | |
| **T.I.:** | | | | |
| TRAVELMATE TI 4000E | 205 | | 859 | |
| TRAVELMATE TI 4000M (NEW) | 205 | 859 | | |
| TRAVELMATE TI3000 (2MG) | 99 | | | |
| TRAVELMATE TI2000 (1MG) | 79 | | | |
| **TOSHIBA:** | | | | |
| T1950, 1900, T1900 CT/1960 | 195 | 389 | 745 | |
| T4400/4500/4700/4800/ 4900 (NEW) | 195 | 389 | 745 | |
| T6400/6600 | 195 | 389 | 745 | 1395 |
| T1850/C, 1800, 2200SX | 185 | 339 | | |
| T2000SXE | 195 | 339 | | |
| PROTEGE 3400 | 195 | 379 | 649 | |
| T2400/3600 | 189 | 369 | 649 | |
| T2450CT | 205 | 395 | 695 | |
| T2000SXE | 195 | 339 | | |
| PROTEGE 3400/360 | 189 | 369 | 649 | |
| PROTEGE 2400 | 195 | 389 | 699 | CALL |
| **TWINHEAD:** | | | | |
| SLIMNOTE & 486DX | 209 | | 749 | |
| SLIMNOTE 1/5 SERIES | 209 | | 749 | |
| **ZENITH:** | | | | |
| Z-STAR 433VL (2MB) | 109 | 379 | | |
| Z-STAR EX | 195 | | 649 | |
| Z-NOTE | 205 | 379 | 679 | |
| Z-NOTE FLEX | 195 | 379 | 649 | |
| Z-LITE 425LSUB (2MB) | 119 | | | |
| **ZEOS:** | | | | |
| COLORNOTE | 209 | | 689 | |
| FREESTYLE | 219 | | 689 | |

## PRINTER MEMORY

| | 2MB | 4MB | 8MB |
|---|---|---|---|
| **APPLE:** | | | |
| PRO 810 | | 219 | 429 |
| **EPSON ACTION LASER:** | | | |
| 1500, 1000 | 129 | | |
| **HEWLETT PACKARD:** | | | |
| HP 4, 4M | 89 | 155 | 339 |
| HP 4P, 4MP | 79 | 145 | 295 |
| HP 4L, ML (1MG ONLY) $55 | | | |
| HP 550, C, 560, C (256K ONLY) $45 | | | |
| HP II/IID | 105 | 159 | |
| HP III, IIIP | 105 | 159 | |
| **OKIDATA:** | | | |
| 400 | 105 | | |
| 400E/4 10E | 119 | 209 | |
| **PANASONIC:** | | | |
| KX 4410/4430 | 109 | 179 | |
| KX 4420/4450i | 139 | 219 | |
| KX 4400/5400 | 149 | 209 | |
| KX 4440/5410 | 149 | 249 | |

CALL FOR MORE PRINTER/MEMORY PRICES!

## CYRIX FASTMATH

| | | |
|---|---|---|
| **MATH CO-PROCESSOR:** | | |
| CYRIX DX40 | 49 | |
| CYRIX SX33 | 45 | |

UNIVERSITIES, GOVERNMENT AND CORPORATE P.O.'s WELCOME!

Prices & Delivery Subject To Change W/Out Notice. Shipping & handling charges are not refundable. All returns require RMA number & copy of original invoice. No refunds or exchanges after 15 days. Purchaser must pay for shipping & insurance for all returns. Restocking fee 20% on non-defective system & goods must be in original resaleable condition. All trademarks are property of their respective owners. Not responsible for typographical errors

# D.M.S. 2622 W. Lincoln Ave., Suite 104, Anaheim, CA 92801
# 714/821-3354 • FAX 714/821-3361

CFP Preview *continued...*

the operation side of activism: outlining tools, strategies, and resources. Information provided will cover the entire scale (individual to organization) and scope (local, national, international) of online activism.

### The CFP Game Room

*-Russell Brand, Senior Computer Scientist, Reasoning Systems, and friends*

Second offering of the morning session. The afternoon session will stress policy games.

## MAIN PROGRAM SESSIONS

## Wednesday, March 29

### 8:45 AM

### Welcome, Introduction

### 9:00 AM

### Keynote Address: John P. Morgridge, Cisco Systems

### 10:30 AM

### Student Databases: For Education and for Life?

*Chair - Janeane Dubuar, Public Interest Activist*

The U.S. education system is rapidly building a nationwide network of electronic student records. This panel will introduce the issue of privacy and K-12 education records and explain how increased computerization and networking of school records, coupled with current education reform trends, are leading us toward an unprecedented invasion of individual privacy.

### 1:30 PM

### Intelligent Transportation Systems: Paving Over Privacy?

*Chair - Christine Harbs, Privacy Rights Clearinghouse*

A myriad of tracking and surveillance technologies is being applied to vehicles and roadways nationwide. Intelligent Transportation Systems (ITS) may speed travel, prevent accidents, reduce the need for new roads, and help lower pollution. But ITS could have a dark side when it comes to privacy. This session will explore ITS, how they may threaten your privacy rights and what can be done to minimize those threats.

### 3:00 PM

### Transaction Records in Interactive Services: Who Watches the Servers?

*Chair - Alan Westin, Columbia University*

The advent of interactive capabilities in home entertainment, telecommunications, and online services gives new importance to concerns about the privacy of the transaction records generated by these services. This session will explore the issues raised by the collection of personal information in these new interactive services, followed by a debate on the various strategies proposed for protecting the privacy of electronic transaction records.

### 4:30 PM

### The Case Against Computers: A Systemic Critique

*Chair - Jerry Mander, Author, Director, The Elmwood Institute*

Technological advances are sweeping through our culture like a virulent plague, changing and devastating people's rights and privileges. The freedoms of an individual are slowly being eroded in favor of corporate and technology-driven interests. Similarly, privacy is increasingly seen as a threat to governments and other bureaucratic power bases. The future of our world's resources, human and material, is in jeopardy. Our panel will critique computers from these as well as other perspectives, including effects on health, democracy, knowledge, and consciousness.

## Thursday, March 30

### 9:00 AM

### Defining Access Paradigms: Libraries, Rural Areas, and International Aspects

*Chair - Peter Harter, The National Public Telecomputing Network*

Access to the Internet and computer mediated communications presents different and similar difficulties in different communities. Experts on the three communities of libraries, rural areas, and lesser-developed countries debate the definitions of access needed for new general and specific access paradigms.

### 10:30 AM

### A Net for All: Where Are the Minorities?

*Chair - Barbara Simons, USACM*

We examine the degree to which minority groups participate on the Net, ways in which they are (inadvertently) excluded, and techniques for increasing their participation. We also discuss characteristics of the Net that encourage broad participation. Finally, we ask to what extent class is relevant to participation or non-participation on the Net.

### NOON

Lunch, with Speaker from 12:45–1:15 pm

### 1:15 PM

### His Master's Voice...

*Chair - Ross Stapleton-Gray, TeleDiplomacy, Inc.*

Early online activists have sought—and achieved—victories in getting political information, such as bills and reports, opened up for public access. But no good deed goes unpunished: the same media that expose government to the sunshine will be useful to disseminate political messages of all stripes. What is the future for "Net propaganda," and who will pay so whose message will get to whom?

### 3:00 PM

### Freedom and Responsibility of Electronic Speech - Part I

*Chair - Virginia Rezmierski, University of Michigan*

Computer-mediated communication systems offer a powerful new medium for the free expression of ideas. At the same time, the growing popularity of these online systems presents interesting challenges to traditional concepts of the rights and responsibilities of free speech. In the first of two sessions on this topic, we will look at several recent controversies involving online speech, and the issues that they raise.

### 4:30 PM

### Freedom and Responsibility of Electronic Speech - Part II

*Moderator - Kim Taylor-Thompson, Stanford Law School*

While courts and legislatures have had two centuries of experience interpreting the Bill of Rights, its application to online communication has yet to be seriously tested. In the second of two sessions, we will explore the issues raised in the previous session in a Socratic forum and ask whether the Constitution can indeed be viewed through a technologically transparent lens.

## Friday 31 March

### 8:00 AM

### Willis Ware: Privacy and Security on the NII

### 8:30 AM

### Can We Talk Long-Distance? Removing Impediments to Secure International Communications

*Chair - Michael Froomkin, University of Miami School of Law*

While strong cryptography is freely available within the US, it is not often exportable. Other nations restrict the importation and/or use of strong cryptography for communications. Even when systems are available and usable in two countries, they are not necessarily compatible. The panel will consider existing technical and policy impediments to secure international communications. After an initial round of reactions from the panel, audience participation will be encouraged.

### 10:30 AM

### Can the Net Survive Copyright? Can Copyright Survive the Net?

*Chair - Lance Rose, Attorney and Author of* Syslaw

**ATS, INC.**
ADVANCED TECHNOLOGIES AND SERVICES INC.

SALES • UPGRADE
REPAIR • DATA RECOVERY

| | |
|---|---|
| 386DX/40ISA w/128K, w/CPU $ 88.00 | 486SLC/33ISA w/CPU $ 70.00 |
| 486DX/33VLB w/256K, w/CPU $ 210.00 | 486DX/50VLB w/256K, w/CPU $ 245.00 |
| 486DLC/40ISA w/128K / CPU $ 150.00 | 486DX2/80VLB w/256K, /AMD CPU $ 275.00 |
| 486DX2/66VLB w/256K, /INTEL CPU $ 275.00 | 486DX4/100VLB w/256K , /INTEL CPU $ 395.00 |

**SPECIAL**

| | | | |
|---|---|---|---|
| Mini Tower w/230PS... | $ 33 | SVGA .39 14"INT... | $ 185 |
| Mid Tower w/230PS..... | $ 48 | SVGA .28 14"NI ... | $ 215 |
| Desk Tower w/230PS.. | $ 36 | SVGA .28 15"NI ... | $ 290 |
| Full Tower w/230PS.... | $ 65 | 1.44 FLOPPY..... ... | $ 32 |
| 101 Key Board..... ... | $ 13 | 1.22 FLOPPY..... ... | $ 42 |
| 2 Button Mouse..... | $ 9 | IDE I/O 2FD/HD..... | $ 10 |
| 512K VGA Card..... | $ 36 | VLB IDE 2FD/HD... | $ 18 |
| 1MB VLB VGA Card.... | $ 65 | 28800 BPS S/R Modem | $ 99 |

**CD ROM SPECIAL**

| | |
|---|---|
| COMPLETE MULTIMEDIA KIT $ 275.00 | QUAD SPEED CD ROM AT w/MULTIMEDIA KIT $ 325.00 |

**MEMORY**

| MEMORY 72 PIN | | MEMORY 30 PIN | |
|---|---|---|---|
| 1M X 36 | (4M) $ 155 | 1 X 3 -70ns Simm | $ 35 |
| 2M X 36 | (8M) $ 295 | 1 X 9 -70ns Simm | $ 38 |
| 4M X 36 | (16M) $ 453 | 4 X 3 -70ns Simm | $ 113 |
| | | 4 X 9 -70ns Simm | $ 125 |

**HARD DRIVE SPECIAL**

| | | |
|---|---|---|
| 420 MB.....$ 175 | 850 MB..... $ 275 | 540 MB scsi...$ 255 |
| 540 MB.....$ 199 | 1.08 GB..... $ 385 | 290 MB scsi...$ 190 |
| 730 MB.....$ 255 | 1.28 GB..... $ 425 | 2.5" NOTE BOOK |
| 340 MB.....$ 165 | 1.06 GB scsi $ 385 | 250 MB.....$ 235 |

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

**SPECIAL REPAIR PRICES**

| | | | |
|---|---|---|---|
| ST225 ST238 | $ 32 | ST 157A CP3000 | $ 40 |
| ST251 ST351A | $ 45 | MS3650 CP 3044 | $ 45 |
| ST3120A CP3104A | $ 75 | ST 1144A ST 3144A | $ 75 |
| CP30104 XT7120A | $ 75 | WD2120A Q120AT | $ 75 |
| CP3204F CP30174E | $ 90 | LXT7213A WD2200A | $ 90 |

90 - DAY's WARRANTY ON REPAIR
4 - DAY TURN-AROUND TIME

**HARD DRIVE REPAIR**

| | | | |
|---|---|---|---|
| 40 - 69 MB..... | $ 60 | 150 - 199 MB... | $ 100 |
| 70 - 119 MB.... | $ 75 | 200 - 249 MB... | $ 110 |
| 120 - 149 MB.. | $ 80 | 250 - ABOVE . | $ CALL |
| ESDI | CALL | SCSI | CALL |

**DATA RECOVERY**

ON-SITE REPAIR/SERVICE

*PROFESSIONAL QUALITY SERVICE & SUPPORT*

- System Upgrade
- Same Day On Site Service
- Hassle-Free Upgrades & Repair
- IBM & All Compatibles
- Flat Fee Plus Parts

CALL US TODAY FOR OUR NEW PRODUCT & PRICE LIST

SALES CALL PH # (310) 219-2100
SERVICE CALL PH # (310) 676-0487

12567 CRENSHAW BLVD., HAWTHORNE, CA 90250


# Views

## CFP Preview *continued...*

The world's largest companies are thundering into cyberspace and pursuing infringements everywhere, raising the stakes on information freedom. A proper balance must be reached between the competing needs of information usage and information control. Since copying and distributing information are central to all Net activities, the question of copyrights online will be critical in shaping how much freedom we really have.

### 1:15 PM

### "It Oughta Be a Crime..."

*Chair - Kent Walker, U.S. Department of Justice*

Hacking. Cracking. Piracy. Obscenity. Anonymous Threats. Impersonations. Spamming. Cancelbots. Netiquette Breaches. When should bad manners become a crime? Who should set the rules for governing the Net? Hear law enforcement's views, and share a few of your own.

### 2:45 PM

### Who Owns the Law? The Debate Over Legal Citation Form and What It Means

*Chair - Glenn Tenney, Fantasia Systems Inc.*

Opinions issued by courts are in the public domain. Although anyone can publish or distribute the opinions, they are only worthwhile if they include the page numbers that can be used in a citation. And there's the rub—the required page numbers are copyrighted by the original publisher. Do we truly have access to our own laws when the required citation points only to a copyrighted page number? Has electronic publishing made page number references obsolete, and if so, what should take their place and who will own this new citation scheme?

### 4:15 PM

### When Do They Need to Know "Whodunnit"? Discovering the Right Times and Places for Identified, Anonymous, and Pseudonymous Transactions

*Chair - Roger Clarke, Australian National University*

Organizations assume that the people who conduct transactions with them should identify themselves. But as databases become ever more extensive and interconnected, people have an ever greater interest in denying or obscuring knowledge about who they are. Do ways exist to protect the interests of corporations and government agencies on the one hand, and individuals on the other?

### 5:30 PM

### Where Do Things Go From Here?

## Maxis *continued from page 104*

collaborative virtual world is, and how people would interact in that.

But this is such a new medium and it's such a new concept and the dynamics are all so fresh that it'll probably be five years before we even know who we are, much less what we're doing with it. And I'm not going to drive this one by looking in the mirror—it's something that's going to emerge. What's going to happen will be the result of people trying different things.

We're going to put SimCity 2000 in a collaborative online environment, but it's more about "Let's just see what the community brings to simulation." It's like if there's a new seasoning, I'll put it in my stew to see if it helps or not. I'm not sure of the results; I'm not sure what people are going to want to do with this interactive online, and I think it'll be five to ten years before it becomes obvious.

**Gee, this is refreshingly realistic.** [*laughter*]

We don't want to make a big deal out of it. We want to make it a natural extension of our standalone products—as the online picks up with the customers that buy our standalone products, we'll provide a space for them on the online network. There'll be unique features to that, given that there's unique capabilities. But really we see that as a natural extension to what we're already doing. We're looking at it across the board for all our products—what does that mean online?

And I don't think anybody really knows what is going to be the killer app online. That's reality, so I'm not going to pretend that I know it. We're just going to try things, and very conservatively, until we feel that we have something that's worthy of putting out in a broader way.

I couldn't have told you where we'd be today three years ago, either.

Pioneers are the ones with the arrows in their backs and their faces in the dust. It used to be that you wanted to be a year early to be the leader, the first one and all that. I'll be a year late and be just fine.

**Be a year late and properly implemented.**

And be profitable.

Hindsight is 20-20. Everyone knows after it happened what happened. But knowing what's going to happen in the future, that's my job. I have to steer the ship in waters that aren't clear, and there's icebergs underneath of which only a little bit's popping on the top, and they could be good or bad.

We want to keep an open mind about the whole thing. ■

We'll UPGRADE Your 386 to a 486 for only $89

# Lti

UPGRADE your CPU from SX-33 or DX-33 to DX2-66 from $99*

BEATS SUPERSTORE PRICES

*One-year limited warranty on used computers.

## Best Deal in So. California

**FULL SYSTEM $499**
**w/Color Monitor**

- 386SX-33MHz CPU
- 14" SVGA Color Monitor
- 2MB DRAM Memory
- AMI BIOS
- 80MB IDE HD • 2S/1P Ports
- 1.44MB x 3.5" Floppy Drive
- Mini-Tower Case w/220-w PS
- 101-key Enhanced keyboard
- 3 button MS-compatible mouse
- FCC / UL / CSA Approved

## SAME DAY CARRY IN REPAIR SERVICE

## TOTAL COMMITMENT TO CUSTOMER SATISFACTION

## pentium™ PROCESSOR — 90MHz PCI Mid-Tower (w/Color Monitor)

- Intel Pentium™ 90MHz Processor
- PCI + ISA Bus
- 8MB DRAM Memory (72-pin SIMMs)
- 540MB IDE HDD • 1.44MB FDD
- 256KB External Cache
- 14" SVGA N-I 0.28dp Color Monitor
- PCI SVGA Graphics Card 1MB RAM
- FCC / UL / CSA Approved
- Mid-Tower Case w/230-w PS
- I/O - 2S / 1P / 1G
- 3-btn. MS-compatible mouse
- 101-key Keyboard
- Award BIOS

**$1799**

Best Deal in America

## Office Champ!

**VESA Local Bus 486DX2-66 w/Color Monitor $979**

- 486DX-33MHz CPU • Award BIOS
- Pentium™-Ready ZIF Socket
- 4MB DRAM Memory
- 128KB External Cache
- 420MB IDE HDD • 1.44MB FDD
- Cirrus 5428/1MB Graphics
- 14" SVGA 0.28dp Monitor
- VL Bus I/O-2S/1P/1G
- Mini-Tower Case w/220-w PS
- 101-key Enhanced Keyboard
- 3-btn. MS-compatible mouse
- FCC/UL/CSA Approved

## FastGrafik!

**VESA Local Bus 486DX4-100 w/Color Monitor $1099**

Same as above except CPU is 486DX4-100 This unit was the "Top o' the line" just six months ago!

## BUDGET STRETCHER! 33

**FULL SYSTEM $649**
**w/Color Monitor**

*Same as above except the CPU is the 486SLC-33 and includes 4MB DRAM!*

## Multimedia Pkg.

***Includes:*** **$229**

- Panasonic 2X CD-ROM
- 16-bit Sound Card
- Two (2) Quality Speakers - 24 Watt
- 14 CD-ROM Titles including Encyclopedia!

### HARD DRIVES

| | |
|---|---|
| 1GigaByte SCSI | $485 |
| 1GigaByte | $425 |
| 540MB IDE | $209 |
| 420MB IDE | $179 |

### SUPER VGA MONITORS

| | |
|---|---|
| SVGA 14" 0.28dpi | $195 |
| SVGA 14" N-I 0.28dpi | $229 |
| SVGA 15" N-I 0.28dpi LoRad | $329 |
| SVGA 17" N-I 0.28dpi LoRad | $595 |

### RAM UPGRADES

| | |
|---|---|
| 1MB SIMM 70ns | CALL |
| 4MB SIMM 70ns | CALL |
| 8MB (72-pin) 70ns | CALL |
| Other Configurations | CALL |

### ACCESSORIES

| | |
|---|---|
| Panasonic 2X CD-ROM | $125 |
| FAX/Modem 14.4/14.4 | $72 |
| TEAC 4X CD-ROM | $215 |
| Colorado Tape Back-up 250MB | $149 |

Lti COMPUTER Your long term partner

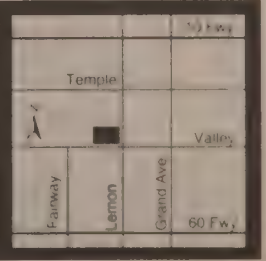
MasterCard VISA

HOURS: M-F 10 AM - 7 PM; SAT 10 AM - 4 PM
20265 VALLEY BLVD. , Ste. O, WALNUT, CA 91789

**(909) 468-5887**

FAX (909) 468-5885
Corporate Sales Line (909) 468-5882

2 YEARS LIMITED WARRANTY




Prices shown based on cash discount. Prices and specifications subject to change without notice. All offers subject to availability from our vendors. Not responsible for typographical errors. All trademarks, registered trademarks, product names and logos are the property of their respective owners. © 1995 Lti Computer Inc. All rights reserved.

# Your Final Source For Computer Solutions.

**COMPUTER BUSINESS CENTER**

## Santa Monica
2811 Ocean Park
(310) 452-2027
FAX (310) 452-5548

## Buena Park
6800 Orangethorpe Ave., #J
(714) 562-0268
FAX (714) 562-0269

## Simi Valley
2139 Tapo Street, #10
(805) 584-8307
FAX (805) 584-8379

## Hours
Mon-Fri: 8:30-6:00
Sat: 10-4

## PENTIUM Intel PCI Motherboard
w/3PCI Slots & 256K Cache, Heat Sink & Cooling Fan.
Built-in IDE & I/O (2S/1P/1G)
8MB RAM
540MB IDE Hard Drive
Teac 1.2 or 1.44MB Floppy Drive
PCI Graphics Accelerator Card w/1MB
15" SVGA Monitor (1024x768) .28 (Low Radiation) NI
101 Enhanced Keyboard & Mouse
Mid Tower or DeskTop Case w/Power Supply

### INTEL 586DX-90MHz
**$2399**

## Pentium 66
**Pentium 66MHz System**
8MB RAM, 256K Cache
420MB IDE HDD
14" SVGA Monitor, N.I.
Enhanced 101 Keyboard
PCI SVGA Card 1MB
PCI Integrated IDE & I/O
3.5" 1.44 Floppy Drive
Microsoft Compatible Mouse
Mid Tower Case w/CPU Fan

**$1995**

## CITIZEN
*Authorized Sales/Service*

| | |
|---|---|
| GSX 190 NEW | $179 |
| GSX 240 NEW | 309 |
| GSX 130 | 275 |
| GSX 145, 1 32 COL | 409 |
| 200GX, 9 Pin | 169 |
| Color Option | 49/69 |

## COLORADO
*MEMORY SYSTEMS INC.*

| | |
|---|---|
| Internal 120MB | $119 |
| Internal 250MB | 169 |
| Trakker 120MB | 249 |
| Trakker 250MB | 299 |

## EPSON
*AUTHORIZED DEALER*

| | |
|---|---|
| LX-300, 9 Pin | $179 |
| LQ-570+, 24 Pin | 275 |
| FX-870/FX117 | 279/369 |
| LQ-870/LQ-1170, 24 Pin | 449/609 |
| LQ-1070 24 Pin, 132 Col. | 395 |
| LQ-2550 24 Pin, High Speed | 899 |
| DFX-5000 9 Pin, 533 CPS | CALL |
| AP 3250, 24 Pin Narrow, 200 CPS | 189 |
| AP 3260, 24 Pin Narrow, 216 CPS | 209 |

**Laser**

| | |
|---|---|
| Actionlaser 1500, 6PPM | $689 |
| EPL-8000 Laser, 10PPM, 1MB | 899 |

**All Accessories Available**

## HEWLETT PACKARD

| | |
|---|---|
| HP LaserJet 4L w/Toner *After Rebate | *$539 |
| HP LaserJet 4ML w/Toner | 969 |
| HP LaserJet 4P w/Toner | 939 |
| HP LaserJet 4MP w/Toner | 1299 |
| HP LaserJet 4 Plus w/Toner | Best Price |
| HP LaserJet 4M Plus w/Toner | Best Price |
| HP LaserJet 4V w/Toner 16PPM | NEW $1879 |
| HP LaserJet 4MV w/Toner 16PPM | 2699 |
| HP LaserJet Color w/Toner | Call |
| HP LaserJet 4SI w/Toner | Call |
| HP LaserJet 4SI MX w/Toner | Call |

**INKJET PRINTERS**

| | |
|---|---|
| Deskjet/Deskwriter 540 | $279 |
| Deskjet/Deskwriter 560C | 469 |
| Deskjet/Deskwriter 320 | 309 |
| Deskjet/Deskwriter 320 w/cut sheet feeder | 359 |

**SCANNERS**

| | |
|---|---|
| HP ScanJet IIIP w/CTRL | $499 |
| HP ScanJet IICX w/ISA CTRL | |
| HP ScanJet IICX w/Mac CTRL | 899 |
| HP ScanJet Doc. Feeder | 489 |

## MACINTOSH
**Apple Power Macintosh 6100/60**
$CALL for pricing and configurations

**Power Macintosh 7100/66**
66MHz Power PC 601 Microprocessor
$CALL for pricing and configurations

## PowerBooks

| | |
|---|---|
| PB 520 4/160 | $2088 |
| PB 520C 4/160 | 2648 |
| PB 520C 12/320 + Modem | 3548 |
| PB 540C 4/320 | 4348 |
| PB 540C 12/320 + Modem | 4948 |
| PB 540C 12/500 + Modem | 5188 |

## PowerBook Special
**DUO**
Duo 270C 4/240 Active Matrix Color 68030/33MHz ..... $2468

## Power PC Specials

| | |
|---|---|
| 6100/60 8/160 | $1398 |
| 7100/66 8/250-CD | 2148 |

**Power Macintosh 8100/80**
80MHz Power PC 601 Microprocessor
$CALL for pricing and configurations

Quadra 630 33MHz 68040 CPU
Power PC Upgradable 4/250 ..... $1198

## Free Custom Configuration

## MISCELLANEOUS

| | |
|---|---|
| Parallel Port TB 525MB EXT | $599 |
| Parallel Port Ext. CD-ROM (Single Speed) | 269 |
| Parallel Port Ext. CD-ROM (Dual Speed) | 399 |
| Phillips (LMSI) IDE INT. KIT(Complete) | 99 |
| Int. Fax Modem 9600 Send/Receive | 79 |
| Int. Fax Modem 14.4 Send/Receive | 99 |

## MONITORS

| | |
|---|---|
| Sony | Call |
| NEC | Call |
| Super Mac | Call |
| Radius | Call |

## NEC MONITORS

| | | |
|---|---|---|
| SVGA 14" | 1024x768 | $325 |
| Multisync 3V 15" | 1024x768 | 475 |
| Multisync 3FGE 15" | 1024x768 | 575 |
| Multisync 4FGE 15" | 1024x768 | 649 |
| Multisync 5FGE 17" | 1024x768 | 975 |
| Multisync 5FGP 17" | 1280x1024 | 1095 |
| Multisync 6FGP 21" | 1280x1024 | 1929 |

## OKIDATA PRINTERS
*Authorized Dealer*

### OL400E
• 4PPM • 300DPI • 512K RAM
• 100 Sheet Tray ..... $425

### OL410E
• 4PPM • 600DPI • 2MB RAM
• 100 Sheet Tray ..... $619

### OL410/PS
• 4PPM • 600DPI • 2MB RAM • Postscript Scalable Fonts • Mac Compt. • Apple Talk Built-in ..... $879

### ML320/321
• 300 CPS • Dot Matrix • 9 Pin ..... $319/429

### ML590/591
• 360CPS • Dot Matrix • 24 Pin • Color Option • 2yr. Warranty ..... $429/569

### DOC IT
• ALL IN ONE • 8PPM Laser • FAX Machine
• Scanner • Copier

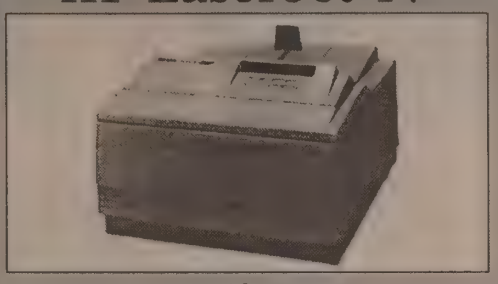
**CALL FOR DEMONSTRATION**

## 486DX2-66VLB Turbo System

INTEL 486DX2-66 CPU w/Fan
ZIF Socket 256K Cache
4MB Memory
420MB Hard Drive
1.44MB Floppy Drive
32-Bit VLB SVGA Card w/1MB
32-Bit VLB HD/FD Controller
2 Hi-Speed Serial Ports
1 Hi-Speed Parallel Port
101 Keyboard, Hi-Res Mouse
14" N-I .28 (1024x768) Monitor
Mini Tower Case

**$1195**

## HP LaserJet 4V



- 16ppm
- 250 Sheet Paper Tray
- 8 1/2x11 & 11x17 Built-in
- 4MB Ram
- 600dpi Res.
- Optional lower tray

**$1890**

## EMC 14" Flat Mono Monitor

**$75**

## AutoCad Release 12

**$1995**

## AutoCad Release 13

**$2495**

# SPECIAL LIMITED QUANTITIES

## IBM NOTEBOOK DEMO

PS1, 486, SL, 25MHz
4MB RAM, 120MB Hard Disk

MONO .....$995
COLOR .....$1295

| | | |
|---|---|---|
| HPIV+ | DEMO | $1100 |
| HPIV | DEMO | $849 |
| HPIII | DEMO | $725 |
| DeskJet 520 | DEMO | $185 |
| DeskJet 500C | DEMO | $225 |
| DeskJet 550C | DEMO | $295 |
| DeskJet 560C | DEMO | $400 |
| DeskJet 540 | DEMO | $235 |
| HP IICX | DEMO | $600 |
| HP FAX 900 | | $420 |

# IBM Notebooks

| | | |
|---|---|---|
| Thinkpad360 | 170/340 | $1849/$2229 |
| Thinkpad360CS | 170/340 | $2279/$2649 |
| Thinkpad360C | 170/340 | $2745/$28991 |
| Thinkpad360CE | 170/340/540 | $2529/$2929/$3279 |
| Thinkpad 755CS 50MHz | 170/340/540 | $3199/$3649/$404 |
| Thinkpad 755CS 75MHz | 170/340/540 | $3669/$4149/$4499 |
| Thinkpad 755C 50MHz | 170/340/540 | $4259/$4719/$5079 |
| Thinkpad 755C 75MHz | 170/340/540 | $4629/$5089/$5499 |

- 755CE 540MB .....$6645
- 755CE 810MB .....$7195

CALL FOR OTHER IBM PRODUCTS

## Creative Labs Discovery Kit

Double Speed CD-ROM Drive
320ms 300kb/sec
Sound Blaster 16 bit stereo, CD quality Sound Card
Includes Groliers Encyclopedia, Games and More.
Amplified Speakers Included!

**$289**

## U.S. Robotics 14.4 Modem/14.4 Fax

V42 & V42bis, high speed data and fax, ultra low cost, ultra high performance. Comes complete with FaxWorks Software.

**$99**

Internal 28.8K Fax/Modem

**$199**

# TOSHIBA

## PORTEGE T3600CT 250MB

Active Matrix Color Display

- Intel 486DX 50MHx Processor
- 8MB RAM • 250MB HD
- 1.44MB Floppy Drive
- 1 PCMCIA Slot/VGA Display
- AccuPoint Mouse
- MS DOS 6/Windows 3.1
- 3 Year Warranty

**$3399**

| | |
|---|---|
| T1910 486SX/33, 200MB, STN MONO | $1299 |
| T1910CS 486SX/33, 200MB, STN COLOR | $1799 |
| T1960CS 200MB, 486DX2/50, DUAL-SCAN | $2099 |
| T1960CS/320MB, 486DX2/50, DUAL-SCAN | $2269 |
| T1960CT/200MB, 486DX2/50, TFT COLOR | $2679 |
| T1960CT/320MB, 486DX2/50, TFT COLOR | $2839 |
| T2400CS/250MB, DX2/50, DUAL-SCAN CLR | $2679 |
| T2400CS/320MB, DX2/50, DUAL-SCAN CLR | $2789 |
| T2400CT/250MB, 486DX2/50, 8MB, TFT CLR | $3249 |
| T2400CT/320MB, DX2/50, 8MB, TFT COLOR | $3369 |
| T4700CT 486DX2/50, 200MB HD, 8MB CLR | $3829 |
| T4700CT 486DX2/50, 320MB HD, 8MB CLR | $4299 |
| T4800CT 486DX4/75, 500MB HD, TFT CLR | $4659 |
| T6600C 486DX2/66, 510MB HD, TFT-LCD | $5349 |
| T6600C/CD 486DX2/66, 510MB, TFT-LCD | $5849 |

## PORTEGE T3400CT 120MB

Active Matrix Color Display

- Intel 486SX 33MHz Processor
- 4MB RAM
- 120MB HD
- 1.44MB Floppy Drive
- 1 PCMCIA Slot/VGA Display
- AccuPoint Mouse
- MS DOS 6/Windows 3.1
- 3 Year Warranty

**$1795**

## TOSHIBA T-4700 CT

- Intel 486DX2-50
- 8MB RAM
- 200/320MB Hard Drive
- Trackball
- DOS & Windows
- 3 Year Warranty

**$3829/$4099**

## 386SX/40MHz Barebones

- Mini Tower Case
- 40 MHz 386SX MB
- 1.2 OR 1.4 MB
- Floppy Drive
- Hard & Floppy
- Controller IDE
- 101 Key Keyboard
- Clock/Calendar
- 2 Serial Ports/ 1 Printer Port/Game

**$245**

## 386DX/40MHz W/128K Cache Barebones

- Mini Tower Case
- 40 MHz 386 DX w/128K Cache
- 1.2 OR 1.4MB
- Floppy Drive
- Hard & Floppy
- Controller IDE
- 101 Key Keyboard
- Clock/Calendar
- 200 Watt Power Supply
- 2 Serial Ports/ 1 Printer Port/Game

**$299**

## 486DX/66MHz W/256K Cache

intel inside

- Mini Tower Case
- 66 MHz 486 DX w/256K Cache
- 1.2 OR 1.4MB
- Floppy Drive
- Hard & Floppy
- Controller IDE
- 101 Key Keyboard
- Clock/Calendar
- 200 Watt Power Supply
- 2 Serial Ports/ 1 Printer Port/Game

**$595**

Prices Subject to change w/out notice. Financing & Leasing Available. EASY QUALIFYING! ****PM=Per Month

# BETTER, FASTE

## PENTIUM PCI

- Pentium PCI Intel Chipset Motherboard
- 8MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 1 GB IDE Hard Drive
- ATi Mach 64 Graphic Engine
- 2MB VRAM
- PCI IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- MAG DX17F 17" Flat-Screen Monitor
- Focus 8000 Keyboard & Calculator
- Microsoft Serial Mouse

**P5/100MHz $2499**
**P5/90MHz $2359**

## PENTIUM PCI

- Pentium PCI Motherboard
- 8MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 540MB IDE Hard Drive
- Cirrus Logic PCI SVGA (1MB)
- PCI IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- MAG DX15F 15" Flat-Screen Monitor
- Focus 8000 Keyboard & Calculator
- Microsoft Serial Mouse

**P5/100MHz $1999**
**P5/90MHz $1859**

## 486 PCI + VLB IDE

- 486 PCI + VESA Local Bus Motherboard
- 4MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- Cirrus Logic PCI SVGA (1MB)
- PCI IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" SVGA 0.28mm Monitor N.I.
- Enhanced 101 Keyboard
- Serial Mouse

**DX4/100MHz $1095**
**DX2/66MHz $1045**

## 486 VLB IDE

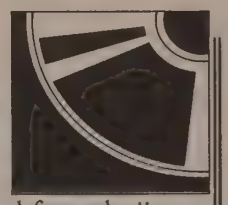
*4X SPEED MULTI-MEDIA*

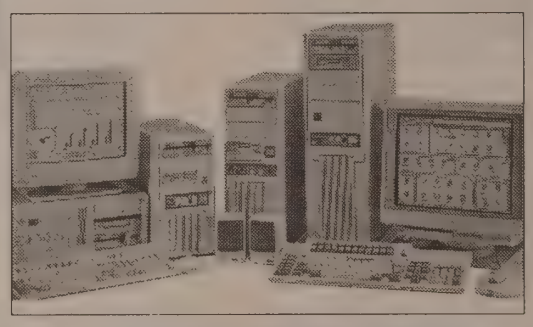
- 486 VESA Local Bus Motherboard
- 4MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- VLB 32 Bit SVGA (1MB)
- VLB 32 Bit IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" SVGA N.I. 0.28mm Monitor
- Enhanced 101 Keyboard
- Serial Mouse
- Mitsumi Quad Speed CD-ROM Drive
- Sound Blaster 16 Sound Card
- 2 Speakers w/Built-in Amplifier
- CD-ROM Software Titles

**DX4/100MHz $1325**
**DX2/66MHz $1275**

## GLIDE

through even the most advanced applications riding the innovation of our new 2X and 4X CD Drives at the speed you need for today!!





## 486 VLB IDE

*2X SPEED MULTI-MEDIA*

- 486 VESA Local Bus Motherboard
- 4MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- VLB 32 Bit SVGA (1MB)
- VLB 32 Bit IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" SVGA N.I. 0.28mm Monitor
- Enhanced 101 Keyboard
- Serial Mouse
- Mitsumi or Panasonic 2x Speed CD-ROM
- Sound Blaster 16 Sound Card
- 2 Speakers w/Built-in Amplifier
- CD-ROM Software Titles

**DX4/100MHz $1245**
**DX2/66MHz $1195**

## 486 VLB IDE

- 486 VESA Local Bus Motherboard
- 4MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- VLB 32 Bit SVGA (1MB)
- VLB 32 Bit IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" SVGA N.I. 0.28mm Monitor
- Enhanced 101 Keyboard
- Serial Mouse

**DX4/100MHz $995**
**DX2/66MHz $945**

## 486SX SYSTEM

*SPECIAL SALE OF THE MONTH*

- 486SX/33MHz Motherboard
- 4MB RAM
- 210MB IDE Hard Drive
- IDE Hard & Floppy Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 3.5" 1.44MB Floppy Drive
- VGA Graphic Card
- VGA Color Monitor
- 101 Enhanced Keyboard
- Lifetime Labor Warranty
- 1 Year Parts Warranty

**ONLY $699**

## 4SLC IDE

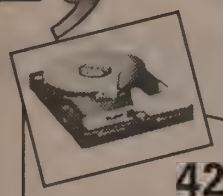
- 486SLC Motherboard
- 2MB RAM
- 3.5" 1.44MB Floppy Drive
- 200MB IDE Hard Drive
- 16 Bit SVGA (1MB)
- 16 Bit IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" VGA Monitor
- Enhanced 101 Keyboard
- Serial Mouse

**SLC2/66MHz $599**
**SLC/33MHz $569**

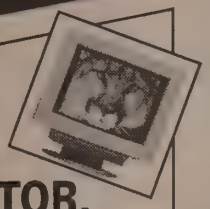
**TRADE-IN YOUR 486DX/33MHz CPU**
**&**
**UPGRADE TO 486DX2/66MHz**
**FOR ONLY $135!**


**TSC Computer Products**
1819 N. Floraldale Ave.
So. El Monte, CA 91733
**Tel (818) 579-2405**
**Tech. Support (818) 579-1446**
**FAX (818) 579-9572**

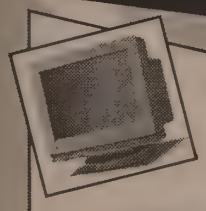
# R, STRONGER!



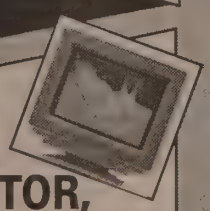
**420MB 3.5" IDE HARD DRIVE**
(13ms Access Time)
$165



**15" SVGA MONITOR,**
1280x1024, .28dp, FLAT SCREEN, 72Hz REFRESH
$295



**17" MAG DX17F SVGA MONITOR,**
1280x1024, .26dp
$595



**14" MONITOR,**
1024x768, .28dp, NON-INTERLACED
$215

## MOTHERBOARD

| | |
|---|---|
| PCI Pentium 100MHz w/256K Cache (Intel Chipset) | $945 |
| PCI Pentium 100MHz w/256K Cache (Opti Chipset) | $895 |
| PCI Pentium 100MHz w/256K Cache (SIS Chipset) | $825x |
| PCI Pentium 90MHz w/256K Cache (Intel Chipset) | $845 |
| PCI Pentium 90MHz w/256K Cache (Opti Chipset) | $795 |
| PCI Pentium 90MHz w/256K Cache (SIS Chipset) | $725 |
| PCI + VLB 486DX4-100MHz w/256K Cache | $325 |
| PCI + VLB 486DX2-80MHz w/256K Cache | $295 |
| PCI + VLB 486DX2-66MHz w/256K Cache | $265 |
| VLB 486DX4-100MHz w/256K Cache | $310 |
| VLB 486DX2-80MHz w/256K Cache | $280 |
| VLB 486DX2-66MHz w/256K Cache | $250 |
| VLB 486DX-33MHz w/256K Cache | $185 |
| ISA 486SX-33MHz | $109 |
| ISA 486DLC-40MHz w/128K Cache | $105 |
| ISA 486SLC2-66MHz | $109 |
| ISA 486SLC-33MHz | $75 |
| ISA 386DX-40MHz w/128K Cache | $78 |
| *"All Pentium & 486's CPU RECOMMENDED CPU FAN"* | |
| 486DX CPU Cooling Fan | $10 |
| Pentium P5-90 CPU Cooling Fan | $20 |
| Pentium P5-66 CPU Cooling Fan | $20 |
| 486SLC CPU Cooling Fan | $18 |
| 486DX CPU Active Cooler | $35 |

## VIDEO CARD

| | |
|---|---|
| VGA 16 Bit 256K Card (800x600 Res.) | $26 |
| VGA 16 Bit 512K Card (1024x768 Res.) | $34 |
| VGA 16 Bit 1MB Card (1024x768x256 Color) | $55 |
| VLB Cirrus Logic w/1MB DRAM | $69 |
| VLB Trident w/1MB DRAM | $69 |
| VLB Trident w/2MB DRAM | $119 |
| VLB S3-805 Chip Windows Acc. w/1MB | $75 |
| VLB S3-805 Chip Windows Acc. w/2MB | $125 |
| VLB ATi Mach 32 w/2MB DRAM | $145 |
| VLB ATi Mach 32 w/2MB VRAM | $225 |
| VLB ATi Mach 64 w/2MB DRAM | $175 |
| VLB ATi Mach 64 w/2MB VRAM | $265 |
| VLB ATi Mach 64 w/4MB VRAM | $459 |
| VLB Diamond Stealth 64 w/2MB DRAM | $165 |
| VLB Diamond Stealth 64 w/2MB VRAM (Upgradable to 4MB) | $265 |
| VLB Diamond Stealth 64 w/4MB VRAM | $425 |
| PCI Cirrus Logic w/1MB DRAM | $95 |
| PCI Cirrus Logic w/2MB DRAM | $145 |
| PCI ATi Mach 64 w/2MB DRAM | $175 |
| PCI ATi Mach 64 w/2MB VRAM | $265 |
| PCI ATi Mach 64 w/4MB VRAM | $459 |
| PCI Diamond Stealth 64 w/2MB DRAM | $165 |
| PCI Diamond Stealth 64 w/2MB VRAM | $265 |
| PCI Diamond Stealth 64 w/4MB VRAM | $425 |

## MONITOR

| | |
|---|---|
| VGA Monitor | $155 |
| 14" SVGA 1024x768, .28mm | $215 |
| 15" KPC 1024x768, N-I .28mm | $295 |
| 15" MAG DX15F 1280x1024, N-I .26mm | $319 |
| 17" MAG DX17F 1280x1024, N-I .26mm | $595 |

## CASE

| | |
|---|---|
| Mini Tower Case w/Power Supply | $45 |
| Mid Size Tower Case w/Power Supply | $60 |
| Full Size Tower Case w/Power Supply | $75 |

## HARD DRIVE

| | |
|---|---|
| IDE 210MB Hard Drive | $135 |
| IDE 420MB Hard Drive | $165 |
| IDE 540MB Hard Drive | $195 |
| IDE 700MB Hard Drive | $285 |
| IDE 850MB Hard Drive | $275 |
| IDE 1GB Hard Drive | $395 |
| SCSI-2 535MB Hard Drive | $235 |
| SCSI-2 1.0GB Hard Drive | $495 |
| SCSI-2 2GB Hard Drive | $935 |

## CONTROLLERS

| | |
|---|---|
| AT I/O 2 Serial, 1 Parallel, 1 Game Port | $14 |
| High Speed I/O (16550 UART) 2 Serial, 1 Parallel | $29 |
| IDE Hard & Floppy Controller & I/O | $15 |
| IDE Hard & Floppy Controller & Hi-Speed I/O (16550 UART) | $42 |
| VLB Enhanced IDE Hard & Floppy Controller & I/O | $29 |
| Promise EIDE 2300 Plus Enhanced IDE Hard & Floppy Controller & Hi-Speed I/O (16550 UART) | $69 |
| IDE Cache Controller (DC600) | $95 |
| SCSI-2 Cache Controller (DC800) | $225 |
| VLB IDE Cache Controller (DC680) | $105 |
| VLB IDE Hard & Floppy Controller & Hi-Speed I/O (16550 UART) | $49 |
| VLB SCSI-2 Controller (Adaptec 6360 Chipset) | $99 |
| VLB SCSI-2, IDE Hard & Floppy Controller & I/O (Adaptec 6360 Chipset, 16550 UART) | $135 |
| PCI IDE Hard & Floppy Controller & Hi-Speed I/O (16550 UART) | $59 |

## KEYBOARD

| | |
|---|---|
| 101 Enhanced Non-click Keyboard | $19 |
| 101 Enhanced Click Keyboard | $23 |
| FOCUS 2001 Keyboard | $30 |
| FOCUS 8000 Keyboard | $35 |
| FOCUS 9000 Keyboard | $58 |

## FLOPPY DRIVE

| | |
|---|---|
| TEAC 1.2 Floppy Drive, 5.25" | $45 |
| TEAC 1.44 Floppy Drive, 3.5" | $35 |
| TEAC Dual Floppy Drive | $105 |

## MEMORY

| | |
|---|---|
| 1MB SIMM 30pin | $38 |
| 4MB SIMM 30pin | $125 |
| 4MB SIMM 72pin (1x32/1x36) | $145/$155 |
| 8MB SIMM 72pin (2x32/2x36) | $285/$305 |
| 16MB SIMM 72pin (4x32/4x36) | $475/$495 |
| 32MB SIMM 72pin (8x32/8x36) | $1050/$1150 |

*We also take Memory trade-in's!*

## MICE

| | |
|---|---|
| Mouse Hi-Resolution | $18 |
| Mouse CP-3 | $10 |
| Microsoft Mouse | $35 |
| Truedox Trackball | $25 |

## CD-ROM DRIVE

| | |
|---|---|
| Mitsumi Quad Speed CD-ROM Drive | $199 |
| Panasonic Double Speed CD-ROM Drive | $115 |
| Toshiba Quad Speed CD-ROM Drive | $295 |
| Sony Double Speed CD-ROM Drive | $114 |
| Mitsumi Double Speed CD-ROM Drive | $113 |
| Sound Blaster 16 Multi-CD Sound Card | $78 |

## SOUND BOARDS

| | |
|---|---|
| Sound Blaster 16 | $115 |
| Sound Blaster Pro | $110 |
| Pro Audio Spectrum 16 | $125 |
| Sound Boomer Card | $58 |
| Speaker For Sound Board | $15 |

## TAPE BACKUP DRIVES

| | |
|---|---|
| Colorado 250MB Internal Tape Backup Drive | $155 |
| Conner 250MB Internal Tape Backup Drive | $145 |
| Conner 420MB Internal Tape Backup Drive | $189 |
| 2120 Tape Cartridge | $15 |

## FAX & MODEM

| | |
|---|---|
| 2400bps Internal Modem | $30 |
| 9624bps Internal Fax Modem | $40 |
| 14400bps Internal Fax Modem | $59 |
| 14400bps External Fax Modem | $115 |

## NETWORK CARD

| | |
|---|---|
| Ethernet 8 Bit (NE1000) | $45 |
| Ethernet 16 Bit (NE2000) | $35 |
| Ethernet 16 Bit (10 Base-T) | $45 |

## TERMS & CONDITIONS

- 1 Year Warranty (Parts & Labor)
- Prices Are Subject To Change Without Notice
- Defective Merchandise Must Have RMA Authorization
- 15% Restocking Charge
- Terms COD Or Prepaid (Cashier Check, Company Check, OAC)
- All Systems 14 Day Money Back Guarantee
- Quantity Discount Available
- Technical Support: (818) 579-1446

**IDE CACHING CONTROLLER**
w/1MB, IT SUPPORTS 4HD & 2FD MAX. 16MB (256/1MB/4MB Simm & Can Be Mixed)
$95

**VLB IDE CACHING CONTROLLER,**
IT SUPPORTS 4HD & 2FD MAX. 16MB (256/1MB/4MB Simm & Can Be Mixed)
$105

**HIGH SPEED I/O CARD,**
2 SERIAL PORT/2 PRINTER PORT (FIFO) w/16550 CHIP 4 INDEPENDENT IRQ LEVELS FOR SERIAL PORTS (IRQ 3,4,5,9)
$29

**540MB 3.5" IDE HARD DRIVE,**
3.5" FORMAT, 1" HEIGHT
$195


**ASC COMPUTER**
22776 Ventura Blvd. Suite A
Woodland Hills
Tel (818) 876-9187
FAX (818) 876-9189

**NSC**
1928 Tyler, Suite A-168
So. El Monte, CA 91733
Tel (818) 454-1039
FAX (818) 454-1040


**UPGRADE YOUR RAM TO 16MB**
FROM 4MB > 16MB $99
FROM 8MB > 16MB $99
JUST PLUG & PLAY!


NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

 *continued from page 105*

test-drive entertainment software before you buy it, this is the place. You're going to see the hottest products today, including sports and action games such as Doom II, Earth Siege, XWing, System Shock, Nascar Racing, Comanche, Front Page Football, Relentless, and many, many more.

## Technical Conference

The theme of Spectrum's 14th annual educational conference is "Connect With the World"—three days of comprehensive technical education for IS managers, programmers, developers, engineers, and resellers. Tracks include "Operating Environments," "Networks/Communications," "Databases," and "Tools/Programming Languages" and feature lectures, panel discussions, and hands-on workshops.

## Captain James Lovell, Apollo Astronaut And High-Tech Executive

**"Apollo 13: A Successful Failure"**
**Tuesday, March 28, 9:00 a.m.**

A veteran of NASA's Apollo era, Lovell was the first person to journey to the moon twice. Captain Lovell recently authored a new book, *Lost Moon*, which will be released as a Hollywood movie later this year. Formerly the president of communications company Contel, he will speak on the two qualities needed to rocket us into the future—personal courage and technological skill. (Keynote address open to full-conference registrants only.)

# Find Employment Or Employees

## On-Site At Spectrum's 3rd Annual Job Match Center

Spectrum's third annual Job Match Center will help you market your technical expertise, or find new talent for your company. The computerized procedure supplies "help wanted" and "position wanted" bulletin board notices to the six thousand-plus show attendees and exhibitors.

Find out how easy it is to meet prospective employers or employees simply by completing and returning the Job Match Listing Form today.

Over seven hundred individuals and companies have been matched up in Spectrum's Job Match Center!

**COMPUTER JOB MATCH FREE LISTING FORM**

INTERNATIONAL Spectrum
The Business Computer Show

NAME _____

COMPANY _____

ADDRESS _____

CITY/STATE/ZIP _____

PHONE _____ FAX _____

❑ Yes, I/we can be contacted during the Spectrum '95 show at:

HOTEL _____ PHONE _____

BOOTH _____ PHONE _____

❑ Position Wanted ❑ Position Available

Salary Range: _____

Description of Position: _____

_____

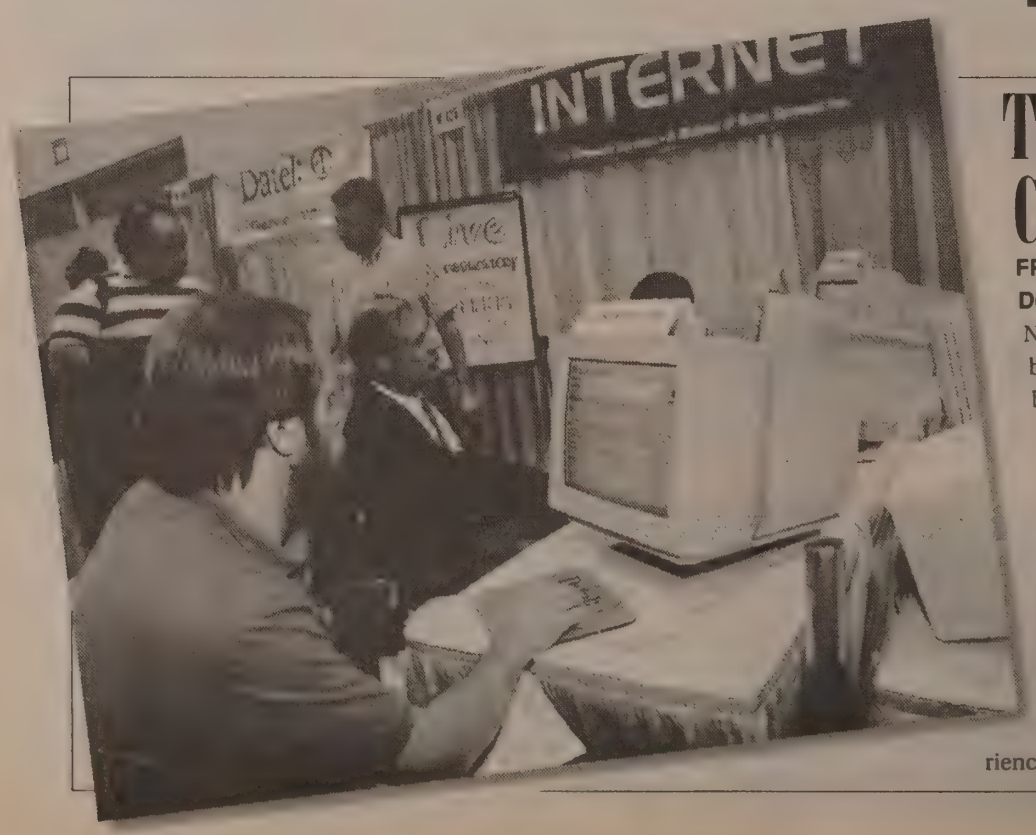
_____

_____

Position Location Preferred: _____

CUT OUT COUPON, MAIL OR FAX TO SPECTRUM OFFICE, OR SUBMIT AT SHOW

INTERNATIONAL SPECTRUM • 10675 Treena Street, Suite 103
San Diego, CA 92131 • Telephone: 619-578-3152; FAX: 619-271-1032




# The Internet Cafe:

**FREE Education And Hands-on Demonstrations All Day!**

Need some time to "phone home?" Stop by our Internet Cafe located on the exhibition floor, sit down at any one of the Internet booths, grab a cappuccino, and check your mail or send messages to the office. Sending messages anywhere in the world has never been more convenient—or more comfortable—while you're away from home.

You can also stop by the Internet Cafe to see live demos of the Internet going on all day, every day. Bring your questions, get some "hands-on" experience, or just come to drink some espresso.

# NEW HIGHER MHZ !!!

FROM *Anthurium*

**NEW!!**

**64 BIT VIDEO + 100MHZ PENTIUM SYSTEMS!**

ELSA
Data Communications
Computer Graphics

## GALANTHUS BEST BUY

- **INTEL PENTIUM PROCESSOR**
- MAIN BOARD W/256K CACHE 3 PCI & 5 ISA SLOTS ON BOARD EIDE & I/O BUILT ON BOARD
- 8MB RAM EXP. TO 128MB
- **1.27 GIG** EIDE HARD DRIVE
- 3.5/1.44MB FLOPPY (TEAC)
- **PCI WINNER 1000 PRO VIDEO W/2MB** 64 BIT VIDEO CARD
- **15" VISION MASTER .SVGA MONITOR** 1280X1024 RES., .28DP, 80KHZ
- ANTHURIUM MIDDLE TOWER CASE **W/300WTS P/S. (UL)**
- 101 KEYBOARD / HI RES. MOUSE

**FREE POWER DRAFT FOR AUTO CADD**

PENTIUM 75MHZ ..... $1899
PENTIUM 90MHZ ..... $2175
PENTIUM 100MHZ ..... $2295

intel inside pentium

VISIONMASTER™ iiyama

## GALANTHUS MULTIMEDIA

- **INTEL PENTIUM PROCESSOR**
- MAINBOARD W/256K CACHE 3 PCI & 5 ISA SLOTS ON BOARD ENHANCED IDE & I/O BUILT ON BOARD
- 8MB RAM EXP. TO 128MB
- **1.27 GIG** EIDE HARD DRIVE
- 3.5/1.44MB FLOPPY (TEAC)
- **PCI WINNER 1000 PRO VIDEO W/2MB** 64 BIT VIDEO CARD
- **15" VISION MASTER .SVGA MONITOR** 1280X1024 RES., .28DP, 80KHZ
- 4X SPEED CD ROM 600KB/S
- PLATINUM 16 SUPER SOUND CARD W/MICROPHONE
- 101 KEYBOARD / HIRES MOUSE
- ANTHURIUM MIDDLE TOWER CASE **W/300WTS P/S. (UL)**

**FREE POWER DRAFT FOR AUTO CADD**
**FREE 120 WATTS SPEAKER W/AMPLIFIER**

PENTIUM 75MHZ ..... $2249
PENTIUM 90MHZ ..... $2525
PENTIUM 100MHZ ..... $2675

## GALANTHUS CADD STATION

- **INTEL PENTIUM PROCESSOR**
- MAINBOARD W/256K CACHE 3 PCI & 5 ISA SLOTS ON BOARD ENHANCED IDE & I/O BUILT ON BOARD
- 16MB RAM EXP. TO 128MB
- 3.5/1.44MB FLOPPY (TEAC)
- **1.27 GIG** EIDE HARD DRIVE
- **17" VISION MASTER .SVGA MONITOR** 1600X1280 RES., .26DP, 90KHZ
- **PCI WINNER 1000 PRO VIDEO W/2MB** 64 BIT VIDEO CARD
- 4X SPEED CD ROM 600 KB/S
- 101 KEYBOARD / HIRES MOUSE
- ANTHURIUM MIDDLE TOWER CASE **W/300WTS P/S. (UL)**

**FREE POWER DRAFT FOR AUTO CADD**

PENTIUM 75MHZ ..... $2849
PENTIUM 90MHZ ..... $3125
PENTIUM 100MHZ ..... $3225

intel inside pentium

# RISC DESKTOP PC !!!

## PROTEA ALPHA 166MHZ WORKSTATION

- **ALPHA 166MHZ MAIN BOARD** W/512K CACHE INTEL 82378 PCI.ISA CHIPSET
- 16MB EXP. TO 256MB MEMORY ON BOARD
- 3.5/1.44MB HIGH DENSITY FLOPPY
- **1.0 GIG** SCSI HARD DRIVE 8.5 MS
- **4X SPEED SCSI CD ROM DRIVE**
- ENHANCED I/O & SCSI II CONTROLLER
- **WINNER 2000 PRO PCI 2MB VIDEO 64 BIT**
- **15" SVGA 1280X1024 RES., IDEK MONITOR**
- 3 BUTTON MOUSE
- 101 KEYBOARD
- ANTHURIUM DESKTOP CASE W/250 W P/S. (UL)

**FREE WINDOW NT 3.5 WORK STATION**
**FREE POWER DRAFT FOR AUTO CADD & NT**

**$4995**

# CALL TOLL FREE 1-800-724- 0210

**WE WILL BEAT ANY ADVERTISED PRICE IN THE SAME LEVEL QUALITY HARDWARE.**

The Intel inside logo is registered trademark of Intel Corporation. All trademarks & tradenames herin are properties of their respective owners
Prices are subject to change without notice Warranty does not include shipping & handling charge PO's, APO, & FPO orders are accepted

ANTHURIUM CORPORATION 16371 GOTHARD STREET UNIT #D HUNTINGTON BEACH,CA 92647
TEL. (714) 375-0210 • FAX (714) 375-0214 HOURS: MON-FRI 8AM-6PM, SAT 9AM-3PM (PST.)

# QUALITY FROM THE COMPANY YOU KNOW & TRUST!

## MONITORS

### NANAO

| | | | | |
|---|---|---|---|---|
| F340iW | 15" | .28 | 1280 X 1024 | $649 |
| F550iW | 15" | .28 | 1280 X 1024 | 949 |
| T217 | 17" | .25 | 1600 X 1200 | 1249 |
| F560iW | 17" | .28 | 1280 X 1024 | 1199 |
| T560i | 17" | .25 | 1280 X 1024 | 1399 |
| T660i | 20" | .28 | 1280 X 1024 | 1949 |
| F760iW | 21" | .31 | 1280 X 1024 | 1849 |
| F780iW | 21" | .26 | 1600 X 1280 | 3099 |
| T220 | 20" | .30 | 1600 X 1200 | 1999 |

### MAG INNOVISION

| | | | | |
|---|---|---|---|---|
| MX 15 | 15" | .28 | 1280 X 1024 | $425 |
| DX 15FG | 15" | .28 | 1280 X 1024 | 325 |
| MXP 17 | 17" | .26 | 1600 X 1280 | 899 |
| MX 17FG | 17" | .26 | 1280 X 1024 | 799 |
| DX 17F | 17" | .26 | 1280 X 1024 | 599 |
| MX 21F | 21" | .28 | 1600 X 1280 | 1699 |

### VIEW SONIC

| | | | | |
|---|---|---|---|---|
| 4E 14" | Super VGA | .28 | 1024 X 768 | $289 |
| 6E 14" | Super VGA NI | .28 | 1024 X 768 | 299 |
| 14E 14" | Super VGA NI | .28 | 1024 X 768 70Hz | 349 |
| 15E 15" | Flat Screen NI | .28 | 76Hz refresh | 389 |
| 15EX 15" | Flat Screen NI | .28 | 1280 x 1024 | 445 |
| 17E 17" | Digital Multi-Freq. | .28 | 1280 x 1024 | 725 |
| 17G 17" | Digital Multi-Freq. | .28 | 1600 x 1280 | 749 |
| 15 15" | Digital Multi-Freq. | .28 | 1280 x 1024 | 455 |
| 17 17" | Digital Multi-Freq. | .28 | 1600 x 1280 | 829 |
| 20 20" | Digital Multi-Freq. | .28 | 1600 x 1280 | 1499 |
| 21 21" | Digital Multi-Freq. | .28 | 1600 x 1280 | 1649 |

### NEC

| | | | | |
|---|---|---|---|---|
| 3V | 15" | Multi-Freq Green EPA | .28 | $449 |
| 3FGe | 15" | Color Monitor | .28 1024 x 768 | 575 |
| 4FGe | 15" | Multi-Freq | .28 1024 x 768 | 650 |
| 5FG | 17" | Multi-Freq | .28 1024 x 768 | 1099 |
| 17XE | 17" | Multi-Freq. | .28 1024 X 768 | 975 |
| 21XE | 17" | Multi-Freq | .28 1024 X 768 | 2049 |

## BUNDLES

MAG DX-15F + DIAMOND ssPRO ..... $479
MAG MX-15F + ORCHID KELVIN E-Z ..... 549
MAG DX-17F + ATi Ultra Plus 2MBO ..... 849
MAG MX-17FG + DIAMOND Viper SE 2MB/4MB ..... 999/1149

Call for our other MONITOR, GRAPHIC, & MOTHERBOARD BUNDLES!

## SYSTEM BOARDS

### AMI

(Made in USA)
(w/CPU, 0K Memory)

| | |
|---|---|
| Titan Dual Pentium EISA/PCI | $1799 |
| Atlas Pentium PCI 90 | 1099 |
| Excaliber Pentium EISA/PCI 60 | 1099 |
| Excaliber Pentium PCI 60MHz | 799 |
| Excaliber Pentium VLB 60MHz (No CPU) | 299 |
| Enterprise IV 486DX2-66MHz EISA VLB | 649 |
| Enterprise IV 486DX-50MHz EISA VLB | 725 |
| Enterprise IV 486DX-33MHz EISA VLB | 599 |
| Super Voyager III 486DX2-66MHz VLB | 549 |
| Super Voyager III 486DX-33MHz VLB | 499 |
| Super Voyager III 486SX-33MHz VLB | 399 |
| Super Voyager III 486SX-25MHz VLB | 339 |

### MYLEX

Largest Selection
ISA, VLB, EISA, Pentium
Lowest Prices Guaranteed

### MICRONICS

| | |
|---|---|
| M5Pi Pentium 60MHz PCI | $799 |
| M5Pi Pentium 90MHz PCI | 999 |
| M5PePentium 60MHz PCI EISA/PCI | CALL |
| M5PePentium 66MHz PCI EISA/PCI | 1099 |
| EV 486 DX 33/66MHz EISA VLB | 499/599 |
| E3 486 DX 33/60 | 499/599 |
| MX-30 486 DX2-33/66MHz VLB | 399/499 |
| JX 30 DX 33/66MHz (w/ IDE I/O) | 399/499 |

### AIR

(Made in USA) (No CPU)

| | |
|---|---|
| 486 VLB | $149 |
| 486 VLB/EISA | 349 |
| Pentium 90 ISA/EISA/PCI | CALL |
| Dual Pentium EISA/PCI SCSI II Wide-IDO-I/O | 1599 |

### SUPER MICRO
(Made in USA)

| | |
|---|---|
| PENTIUM 60/66 PCI/VLB | $699/799 |
| PENTIUM 90/100 PCI/VLB | 849/CALL |

### TYAN
(Made in USA)

| | |
|---|---|
| Dual Pentium 90/100 PCI EISA | $1399/1699 |
| PENTIUM 90/100 PCI/EISA/VL | CALL |
| 486 ISA/EISA/VL | CALL |

### ASUS

| | |
|---|---|
| PENTIUM EISA/PCI 90/100 | CALL |
| PENTIUM ISA/PCI 90/100 | CALL |
| 486DX2-66 ISA/PCI | $499 |

ATTN: All ASUS Boards have Integrated FD/HD/10'S

## HARD DRIVES

### MICROPOLIS®

| | |
|---|---|
| 4110 IDE/SCSI 1.2GB 3.5" | $599 |
| 2217 IDE/SCSI 1.7GB 3.5" | $649/899 |

BEST PRICES GUARANTEED ON ALL OTHER MODELS

### Maxtor

| | |
|---|---|
| 7171 A/S 3.5" | $149 |
| 7345 A/S 3.5" | 179/199 |
| HD 540 A/S 3.5" | 279/325 |

## MONTH'S SUPER SPECIALS

Conner 2.0 GB SCSI ..... $799
Micropolis MC2210A 1 GB Hard Drive ..... 399
**Micropolis MC2217A 2.06 GB Hard Drive ..... 649**
Micropolis MC1936 3.1GB Hard Drive ..... 1179

### WESTERN DIGITAL

| | | | | |
|---|---|---|---|---|
| CAV 2200 | IDE 3.5" | 12ms | 210MB | CALL |
| CAV 2250 | IDE 3.5" | 12ms | 250MB | CALL |
| CAV 2340 | IDE 3.5" | 12ms | 340MB | CALL |
| CAV 2420 | IDE 3.5" | 12ms | 420MB | CALL |
| CAV 540 | IDE 3.5" | 12ms | 525MB | $249 |
| CAV 1.0 | IDE 3.5" | 12ms | 1GB | 449 |

## **RAID**

**We've got the LARGEST selection of the FASTEST Disk Raid Subsystems Available on the Market. CALL one of our EXPERT TECHNICIANS TODAY!!!**

### Seagate

| | |
|---|---|
| ST-31200N/W 1GB | $599/699 |
| ST-12550N 2.1GB | 1149 |
| ST-12450N/W | CALL/1599 |
| ST-32550N/W | 1099/1199 |
| ST-12400N 2.1GB | 899 |
| Seagate 15150/W | CALL/1999 |

## PC POWER & COOLING

270W SILENCER ..... $169
300W TURBO-COOL ..... 179
450W TURBO-COOL ..... 329

## CONTROLLERS

| | | | | |
|---|---|---|---|---|
| AMI FASTDISK | EISA / CACHING | | | $399 |
| AMI FASTDISK | EISA / NON-CACHING | | | 219 |
| AMI FASTDISK | VLB 32Bit CACHE | | | 399 |
| AMI FASTLAN | SCSI II / ETHERNET | | | 425 |
| AMI FASTLAN | ETHERNET | | | 329 |
| MYLEX DCE | EISA / SCSI II CACHING | | | 449 |
| MYLEX LNE | EISA / ETHERNET | | | 299 |
| ADAPTEC | 2742 EISA / SCSI II | | | 375 |
| ADAPTEC | 1542B ISA / SCSI II | | | 259 |
| PROMISE | VLB IDE / CACHING | | | 125 |
| ADAPTEC (PCI) | 2940/2940W | | | 229/299 |

## VIDEO ADAPTORS

### DIAMOND
Computer Systems, Inc.

| | |
|---|---|
| SPEED STAR PRO VLB | $109 |
| SPEED STAR 64 PCI | 145 |
| STEALTH 24 VLB/ISA w/1MB | 155 |
| **STEALTH 64 VLB/PCI 2MB/4MB** | **279/449** |
| Viper VLB/PCI 2MB | 279 |

### ORCHID

| | |
|---|---|
| KELVIN 64 VLB/PCI 1/2MB | $149/199 |
| KELVIN E-Z VLB/PCI 1/2MB | 109/149 |

Fahrenheit VLB w/ Sound 1MB/2MB
BRAND NEW! Fahrenheit 64, 64 Pro & Prodesigner 64
CALL FOR BEST PRICES!

### ATi

| | |
|---|---|
| Ultra Plus Turbo 64 VLB/PCI 2/4MB | $299/499 |
| Ultra Plus Turbo 64 VLB/PCI 2/4MB | 249/449 |
| Ultra Plus/Pro 32 VLB/PCI 2MB | 199/249 |
| WONDER MACH 32 VLB/PCI 1MB | 119 |

ALL OTHERS CALL!!!

### matrox

ISA/VLB/PCI All in Stock
Call for Best Prices

## MULTIMEDIA

| | |
|---|---|
| SONY/SANYO CD-ROM | $149 |
| TOSHIBA 3501 CD-ROM QUAD-SPD. | 299 |
| NEC 3 Speed 510 CD-ROM | 379 |
| TEAC QUAD Speed | 279 |

CALL FOR OUR CD-ROM, SOUND CARD BUNDLE PACK SPECIALS!!!

## SYSTEMS / CASES

ATTENTION!!!
WE CUSTOM CONFIGURE SYSTEMS TO YOUR SPECIFICATIONS. CALL ONE OF OUR FRIENDLY & KNOWLEDGEABLE CONSULTANTS TODAY!

DIAMOND CASES
MINI TOWER 230W MID / FULL TOWER 250W
SUPER TOWER 300W HEAT FAN

WE ARE ONE OF THE LARGEST OEM ASSEMBLY HOUSES ON THE WEST COAST WITH TRAINED TECHNICIANS TO ANSWER ALL YOUR SUPPORT NEEDS.

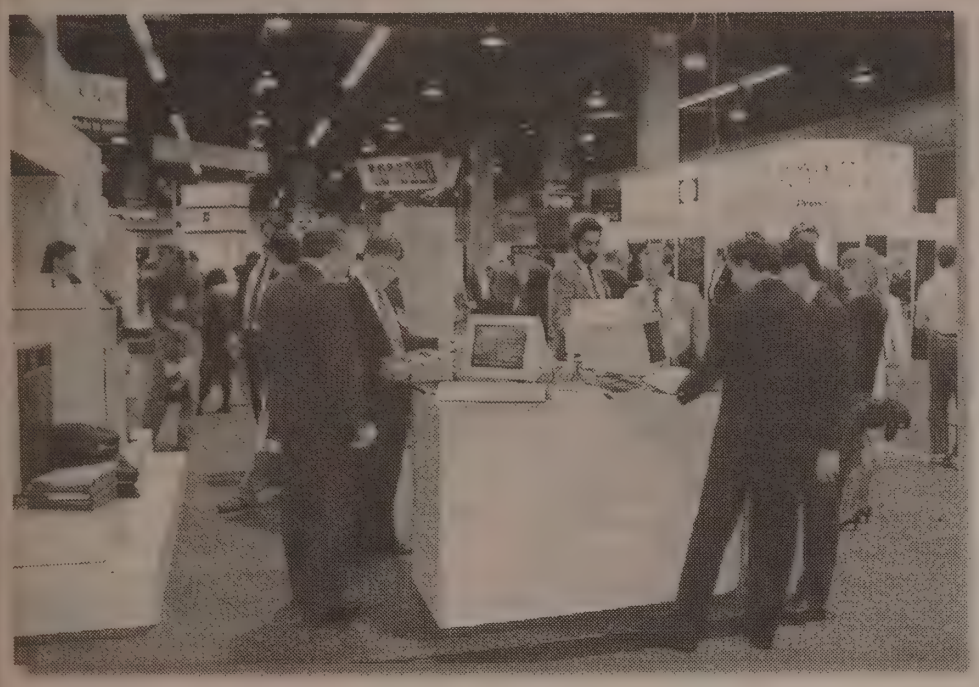
**Open M-F**
**8AM-6PM**

- Prices Subject to Change
- Not Responsible for Typographical Errors

*Serving you for 10 Years*

SOFT HARD SYSTEMS

(818) 999-9531
(818) 999-9683 FAX
6301 DeSoto Ave. Suite C
Woodland Hills, CA 91367



# Exhibitor List

| Booth | Company Name |
|---|---|
| 343 | *1MAGE Software* |
| 129 | *Access Graphics* |
| W301 | *Advanced Network Consultants* |
| 421 | *Alpha Microsystems* |
| 149 | *American Computer Hardware* |
| W832 | *America's Advanced Accessories* |
| 608 | *Apple Computer, Inc.* |
| W261 | *Apple Computer Products* |
| 341 | *CableWorks* |
| W401 | *Caprica Telecomputing Resources* |
| 617 | *Carnation Software* |
| W848 | *Castronova Systems* |
| W705 | *Cellular Guidelines* |
| 538 | *Compusol* |
| 821 | *Computer City* |
| W834 | *CT Connection* |
| 728/729 | *Cuebic Systems, Inc.* |
| 549 | *Dataflex* |
| 532 | *Data General* |
| W836 | *Deltec Corp.* |
| 237 | *Dickens Data Systems* |
| W842 | *DisCopy* |
| W504 | *Discount Laser* |
| 355 | *DTR Business Systems* |
| 640 | *Extended Systems* |
| W826 | *First Choice Personnel* |
| 642 | *GP Solutions* |
| 618 | *Hassett & Associates (CBT)* |
| 539 | *Hewlett-Packard* |
| 231 | *IBM* |
| W505 | *Instant Data Systems* |
| 516 | *In/sync Data Products* |
| 244 | *Interactive Media* |
| 843 | *Internet Cafe* |
| 644 | *Intuitive Technology* |
| 612 | *Jadtec Computer Group* |
| 541 | *JAC* |
| W403 | *KCS Enterprises* |
| W305 | *Kuffel Information Systems* |
| 256 | *LANSHARKS* |
| 508 | *Law Cypress* |
| 250 | *Liant Software* |
| 536 | *Micom* |
| 560 | *MicroTimes (Sponsor)* |
| 409 | *Modular Software* |
| 509 | *Monolith* |
| W605 | *Multi-Value Products* |
| W702 | *NASBUG* |
| 339 | *NCE Computer Group* |
| 513 | *New Horizons Computer Learning Ctr.* |
| 451 | *News & Review* |
| W501 | *Omnidata* |
| 540 | *OnLine Software Labs* |
| 609 | *PC Systems Design* |
| 514 | *Pick Professionals, Inc.* |
| 229 | *Pick Systems, Inc.* |
| W838 | *Piiceon, Inc./Helios Systems* |
| 243 | *Point Information Network* |
| 616 | *Prelude Systems* |
| 515 | *Progressive Computing Solutions* |
| 350 | *Pyramid Technology* |
| 615 | *Relisys* |
| 248 | *Revacomp* |
| 152 | *Robec* |
| 651 | *R.O.I. Syngineering* |
| 638 | *ROI Systems, Inc.* |
| 349 | *Royce Digital* |
| 620 | *RTW, Inc.* |
| W303 | *Rx Laser, Inc.* |
| 242 | *SBM, Inc.* |
| W405 | *Scientific Vision Systems* |
| 323 | *Sequoia Systems, Inc.* |
| W808 | *Software Academy* |
| W304 | *Software Education of America* |
| 537 | *Spinoff* |
| 648 | *Stauffer Information Systems* |
| 624 | *Strategy 7 Corp.* |
| W818 | *Structured Software Solutions, Inc.* |
| 129 | *Sun Microsystems, Inc.* |
| 506 | *Sun River Data Systems* |
| 243 | *Symbol Technologies* |
| 621 | *System Builder Technologies* |
| 637 | *Technology One* |
| W820 | *The Camry Group* |
| 634 | *The Computer Clinic* |
| 637 | *The Santa Cruz Operation* |
| 639 | *The Software Group* |
| 415 | *The Systems House* |
| 716 | *Thor Agency, Inc.* |
| 631 | *Unidata, Inc.* |
| 734 | *Unisys* |
| 611 | *United Education Institute* |
| 518 | *University Copy Systems* |
| 238 | *USC Software* |
| 614 | *Userbase Systems* |
| 613 | *VARCITY* |
| 446 | *Varmark* |
| 651 | *Vertex, Inc.* |
| 721 | *Viagrafix* |
| 329 | *VIA Systems* |
| 223 | *VMark Software, Inc.* |
| W404 | *Weaver Consulting* |
| 445 | *WordMARK International* |
| 545 | *XY Systems* |

continued from page 120

## GreenDesk For Windows

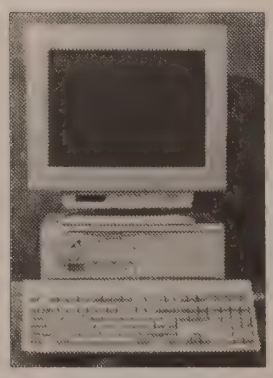
GreenDesk for Windows is a complete personal document image management and cross-application electronic file cabinet solution for small office/home office professionals and Windows users in general. It allows users to integrate paper and computer files in one instant-access system for improved personal and office productivity. GreenDesk supports all PC-based scanners, imports and compresses stored PC-based fax files up to 45:1, and automatically converts scanned documents to text files with near 100% accuracy.

It contains a built-in hierarchical database "File Cabinet" with drawers, folders, and documents for storing any Windows object, including sound and video; and features unlimited user-definable "SmartTabs" folder searching and keyword and Boolean searching for easy document access. ($99) SmartImager Corp., 5137 Clareton Dr., Suite 200, Agoura Hills, CA 91301-4526. 1-800-588-DESK.

# PC Hardware

## Anthurium Protea 166

Anthurium's Protea 166 is a personal workstation that features DEC's 64-bit Alpha AXP RISC processor with FPU. The system runs under Windows NT 3.5 and includes an integrated PCI local bus, a PCI 64-bit graphics accelerator with 2MB of VRAM, 32-bit PCI Ethernet card, a double-speed CD-ROM drive, 540MB SCSI hard drive, and 16MB of RAM expandable to 256MB. The Protea 166 is very fast at graphics- and numeric-intensive applications, and will outperform some midrange UNIX workstations. It is designed to be upgradable. ($4995) Anthurium Technology, Inc., 1-800-724-0210.



## Digital's Starion Line

Digital's Starion line of personal computers is aimed at the small office/home office market. They are designed to be easy to set up and use, upgradable, and reliable. All five models—the 200, 300, 400, 500, and 700—include 16-bit stereo sound, speakers, and microphone, and Sound Blaster PRO compatibility; built-in telephone answering machine; MaxFax communications software and a 14.4 fax modem; multimedia demos and tutorials to assist users with business tasks, such as sending a fax and data conferencing; preloaded MS-DOS, Windows for Workgroups, and online software manuals; Intel ProShare software for data conferencing; ClarisWorks; Lotus ScreenCam software for multimedia tutorial creation; CompuServe online information service; for the four CD-ROM models (not the 200), American Business Information's 11 Million Businesses Phone Book; and one-year, on-site warranty service. The Starions are built around 486DX2 (the 200 and 300) and Pentium processors with 8MB of RAM and a minimum 540MB hard drive. The 500 and 700 models include 250MB tape drives, and the 200 and 400 models include monitors. ($1799 and $2399 for the 200 and 400, respectively; available exclusively at Sam's Club. $1699, $2299, and $2799 for the 300, 500, and 700, respectively; available exclusively at CompUSA) Digital Equipment Corp., 146 Main St., Maynard, MA 01754-2571. 1-800-722-9332.

# Printers/ Scanners

## UMAX BizCard Reader

The BizCard Reader is an ideal business card scanner for executives who frequently travel to networking events where they collect large numbers of business cards. Based on UMAX's processing technology, it allows PC users to work in other applications while it scans continuously in the background. It weighs less than a pound and provides many features to simplify the management of business contacts: it scans and converts multiple cards quickly; scans in any direction, portrait or landscape, without requiring the user to readjust or reinsert the card; and includes its own database manager, allowing users to locate and retrieve contacts quickly and easily. The BizCard Reader scans directly into most contact management software including ACT! and PackRat. ($249) UMAX Technologies, Inc., 3353 Gateway Blvd., Fremont, CA 94538. (510)651-8883.

# Games

## ConcertWare 1.5

ConcertWare is a music composition and arrangement program for beginners to accomplished musicians. It combines notation and sequencing features in an easy-to-use format. Musicians can quickly record music using the computer keyboard or any MIDI instrument. The music is displayed on the screen in standard notation. ConcertWare lets users play back their music and then edit it using intuitive cut-and-paste and point-and-click tools; it can then be printed as professional-quality sheet music in a complete score or individual parts. ConcertWare comes with a "Making Music" CD-ROM that features an interactive tour and tutorial, and intro to MIDI, and "How I Wrote My Fifth Symphony With ConcertWare" by Beethoven. ($159 for Macintosh and Windows versions) Jump! Software, Inc., 201 San Antonio Cir., Suite 172, Mountain View, CA 94040. (415)917-7460.


Pentium-66 PCI
- INTEL 66 MHz CPU w/ Fan
- 8 MB RAM / 256K Cache
- 340 MB IDE Hard Disk
- 1.44 MB Floppy
- Enhanced on Board PCI IDE Controller
- PCI SVGA w/1 MB
- 14" SVGA Monitor
- On Board Enhanced 2 S & 1P
- MID Tower w/230 W UL P/S
- 101-key Enhanced Keyboard
- Microsoft compatible Mouse

$1,299.00*

486DX2-66 VLB
- 3 VLB-INTEL CPU
- 4 MB RAM / 256K Cache
- 420 MB IDE Hard Disk
- 1.44 MB Floppy
- VESA IDE w/ 2 S 1 P
- 32 BIT VESA 1MB SVGA
- 14" SVGA Monitor .28 dp NI
- MID Tower w/230 W UL P/S
- 101-key Enhanced Keyboard
- Microsoft compatible Mouse
- Sound Blaster 16 MCD
- Panasonic 562B 2X CD ROM
- Amplifier Speakers
- 200 PLUS Titles

$1,199.00*

SILICON AVENUE AND Computer Books 4 Less
980 E. Orangethorpe Ave., #C
Anaheim, CA 92801
(714) 680-0828
1212 N. San Fernando Blvd., Suite K
Burbank, CA 91504
(818) 567-0016
All Computer Books 20%–80% OFF!
*Price Reflects a 3% Discount for CASH

Multimedia 4XS TOSHIBA 3501 Quad Speed
SB16 SCSI II
200 PLUS Titles & Speakers
$399.99*

Multimedia 4XT TEAC Super Quad
SB16 MCD
200 PLUS Titles & Speakers
$299.99*

540 MB IDE
CONNER $189.99*
850 MB IDE
Maxtor $259.99*

Multimedia 2XP PANASONIC 562 Dual Speed
SB16 MCD
200 PLUS Titles & Speakers
$229.99*

# MICRO LEAGUE, THE EXPERTS IN SOURCING PRODUCTS. IF WE CAN'T GET IT...IT'S NOT OUT THERE.

90 DAYS FREE FINANCING AVAILABLE

"FREE" 1995 ELECTRONIC PRICE BOOK *OVER 25,000 ITEMS. *SEARCH BY MANUFACTURER ITEM PART NO. OR DESCRIPTION. *UPDATED MONTHLY. *LIST OF MANUFACTURER'S PHONE NUMBERS, BULLETIN BOARDS, TECHNICAL SUPPORT. *CREATE PROFESSIONAL QUOTES.

ViewSonic

## PENTIUM

### 586 PCI Motherboard

w/3PCI Slots & 256K Cache, Heat Sink & Cooling Fan.
Built-in IDE & I/O (2S/1P/1G)
8MB RAM
Conner 1 Gig IDE Hard Drive
Teac 3.5" 1.44MB Floppy Drive
64 Bit PCI Graphics Accelerator Card w/1MB
14" SVGA Monitor (1024x768) .28 (Low Radiation) NI
101 Enhanced Keyboard & Mouse
Mid Tower or DeskTop Case w/Power Supply

**Pentium DX-100MHz $2249****
**Pentium DX-90MHz $2099****

### Multimedia Kit

**Media Vision**
Pro Audio 16 SoundCard CD-Quality, 16-Bit Digital Audio, Advanced 20 Voice Synthesizer.....$79
•16 Bit CD Quality Sound Card
•Multimedia Magnetically Shielded Speakers
•Many CD Titles

DOUBLE SPEED CD-ROM $219
4x QUAD SPEED CD-ROM $495

## VESA Local Bus System

3 VL-Bus Slots 4MB RAM
256K Cache, Pentium P24T Ready
Teac 3.5" 1.44MB Floppy Drive
420 MB IDE Hard Drive
32-Bit V-Local Bus Super IDE & I/O
(2 Serial, 1 Parallel, 1 Game Ports)
32-Bit V-Local Bus SVGA Card w/1MB
14" SVGA Monitor (1024x768) .28 Color
101 Enhanced Keyboard & Mouse
Mid Tower or DeskTop case
w/230 Watt Power Supply

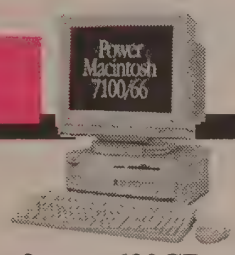
**486DX2/66 ..... $959****
**486DX4/100 ..... $1099****

**w/purchase of GE Extended 4 yr. On-Site Warranty

Authorized Dealer & Service Center

TOSHIBA
Canon
NEC
Panasonic
COMPAQ
HEWLETT PACKARD
TEXAS INSTRUMENTS

## POWER PC




### Quadra 630

•68040 Processor with Integrated Math Co-Processor
•66/33MHz Speed
•Four Expansion Slots for Ethernet, Modem, Video, or TV tuner Cards.
•1MB VRAM for built-in Monitor Support

4MB 250HD $1059

### Performa 6115

Power PC 601/60MHz, 8MB, 350MB HD, Apple Multiple Scan 15" Display
KB, Monitor, Modem
Global Village Teleport II 14.4, Apple Design Keyboard, Mouse Int. CD Drive

8MB 350HD/CD $2689

### Performa 630CD

68040-66MHz, 8MB Ram, 250HD, 14" plus display, Design Keyboard, Int. CD-ROM, Fax/Modem, 6 CD Titles

$1829

### POWER MAC 6100/66

•66MHz Power PC
•1MB VRAM
•Built-in Local Talk & High Speed Ethernet Connections
•System 7.5

8MB 350HD,CD $1869
8MB 350HD $1639

## APPLE POWERBOOK

**PowerBook 150**, 68030-33MHz
4MB/120HD ..... $1299
**PowerBook 520**, 68040-50/25MHz
4MB/160HD..... $1799
**PowerBook 520C**, 68040-50/25MHz
4MB/160HD..... $2299
**PowerBook 540C**,68040-66/33MHz
4MB/320HD..... CALL

### TOSHIBA *Authorized Service Dealer*

**T1910** 486SX-33, 4MB/200 .... $1299
**T1910CS** 486SX-33, 4MB/200(COLOR) ..... $1759
**T1960CS** 486DX2-50 4MB/320 ..... $2299
**T1960CT** 486DX2-50 4MB/200/320 ..... $2599/CALL
**T4800CT** 486DX4-75 8MB/500HD ..... $4399
SPECIAL **T3400CT** Protege 486DX/33 4MB/250HD .... $1999
NEW **T2400CT** 486DX2-5 8MB/250/320HD.. $2999/CALL
T4900CT, Pentium 75MHz, 8MB/810HD..... IN STOCK

### #1 IBM Authorized Advanced Product Dealer & Service Center.

THINKPAD 755CE
486 DX4/100
8MB,340
$5899

Authorized Warranty Repair Provider, On Site Service, Rental Delivery & Set Up, Training, Technical Support, Network Specialist.

### COMPAQ *Authorized Dealer & Service Center*

**NEW Contura 400** DX2/40C 4MB/250HD (COLOR) ..... $2499
**Contura 400** DX2/40CX 4MB/250HD (ACTIVE)..... $3059
**Contura AERO** 4/33C, 486DX-33 4MB/250HD Mono w/Floppy..... $1849
**LTE ELITE** 4/50CX 8MB/340HD (TFT)..... $4535
**LTE ELITE** 4/75CX 8MB/340HD/510 ..... $4999/5399

ALL DESKPRO, PROSIGNIA, PROLIANT MODELS AVAILABLE AT LOWEST PRICES CALL US!

### OKIDATA *Authorized Dealer & Service Center*

**320/321** 9PIN..... $309/419
**ML380,** 24PIN..... $215
**520/521** 9PIN..... $375/489
**590/591** 24PIN..... $425/CALL
**Doc-it 3000,** 300dpi, Laser, Fax, Scanner, Copier ..... $1099
OL400E, 300DPI, 4PPM..... $409*
**OL 410E** 600dpi 2MB ..... $529
OL410E/PS, MAC Comp..... $[illegible]

HOURS: 9AM - 6PM M-F
10:30AM-4PM SAT

### HEWLETT PACKARD *Authorized Dealer*

**HP Laserjet 4L** w/Toner.....
**HP Laserjet 4ML** w/Toner..... $949
**HP Laserjet 4P** w/Toner ..... $929
**HP Laserjet 4MP** w/Toner..... $1299
**HP Laserjet 4+** w/Toner..... $1[illegible]
**HP Laserjet 4M+** w/Toner IN STOCK
**HP Laserjet 4V** w/Toner ..... $1869
**HP Laserjet 4MV** w/Toner .....NEW
**Deskjet 540** .....
**Deskjet/Deskwriter 560C** .....
**Deskjet/Deskwriter 320 Portable.** $299
**Deskjet 1200C & 1200CPS** IN STOCK
**HP ScanJet IICX** w/CTRL..... $749*
**HP ScanJet IIIP** w/CTRL..... $489
NEW **HP OfficeJet Fax/Copier**..... $799

CITIZEN
OKIDATA
IBM Authorized Dealer
SCO
Novell Gold Authorized Reseller
Authorized Dealer

Corporate Accounts, Dealers, Government and School P.O.'s Welcome

CONTACT US THROUGH THE INTERNET:
MICROLEAGUE@DELPHI.COM

# ML MICRO LEAGUE INC.

**1844 LINCOLN BLVD. (NORTH OF PICO) SANTA MONICA, CA 90404**

310-450-2708
OUT OF STATE
800-466-2708
FAX (310) 452-1294

Prices Good With This Ad Only. All Prices are Cash/Check Discounted.
*Price after manufacturer's rebate.

SINCE 1989 PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE

Apple, the Apple logo, LaserWriter, StyleWriter, Mac & Macintosh are registered trademarks of Apple Computer Inc.

# MEMORY OUTLET

## CALL 1-800- 956-8726

CUSTOMER & TECH SUPPORT (714) 373-6770

| 30 PIN SIMMS | | | | 72-PIN SIMMS | | | | CPU |
|---|---|---|---|---|---|---|---|---|
| SPEED | 60 | 70 | 80 | SPEED | 60 | 70 | 80 | PENTIUM 100 |
| 1X9.3 | 42 | 40 | 38 | 1 MB | 45 | 42 | 40 | PENTIUM 90 |
| 1X9.9 | 45 | 44 | 42 | 2 MB | 98 | 95 | 90 | PENTIUM 66 |
| 1X8.2 | 32 | 30 | 29 | 4 MB | 165 | 159 | 155 | PENTIUM 60 |
| 1x8.8 | 40 | 38 | 36 | 8 MB | 335 | 329 | 320 | 486 DX 100 |
| 4X9.9 | 149 | 148 | 146 | 16 MB | 595 | 575 | 565 | 486 DX 2-66 |
| 4X8.8 | 135 | 134 | 132 | 32 MB | 1299 | 1275 | 1250 | 486 DX 33 |

| D-RAM | CACHE | VIDEO |
|---|---|---|
| 1X1 | 32X8 | 256X4 |
| 256X4 | 128X8 | 256X16 |
| 256X1 | 8X8 | 128X8 |
| 1X4 | 64X1 | 256X8 |

SPECIALIZED MEMORIES AVAILABLE

PRINTER MEMORY

APPLE IBM
BROTHER KONICA
PANASONIC CANON
OKIDATA EPSON
HP SHARP

IBM TOSHIBA Apple HEWLETT PACKARD LEADING EDGE TI

NOW AVAILABLE SPECIAL ADAPTER TO CONVERT 30pin SIMM to 72pin SIMM! CALL FOR DETAILS!!

NEC COMPAQ AST ZENITH DELL

ALL PRICES ARE SUBJECT TO CHANGE. FAX P.O. AT (714) 373-6768

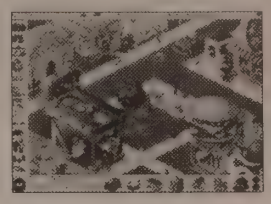
ABCOM COMPUTER PRODUCTS
15561 PRODUCER LANE UNIT I&J HUNTINGTON BEACH CA. 92649

SHIPPING AND HANDLING CHARGES ARE NOT REFUNDABLE. FOR RETURNS ON REFUSED PACKAGES WITHOUT PROPER RMA. ON NON DEFECTIVE PARTS NO RETURNS ACCEPTED AFTER 30 DAYS OF SALE. NON DEFECTIVE RETURNED MERCHANDISE SUBJECT TO 20% RE-STOCKING FEE. ALL RETURNED MERCHANDISED SHOULD BE IN ITS ORIGINAL UNUSED CONDITION AND SHOULD BE ACCOMPANIED WITH ORIGINAL INVOICE. WARRANTY PROVIDED FOR REPLACEMENT OF PARTS ONLY. ALL TRADE MARKS ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS.


# Product Spotlight

## SimTown

Designed for children aged nine to twelve, SimTown for Macintosh CD-ROM encourages players to learn through exploration, building creations on the computer that reflect their individual personalities. It lets children design, build, and manage their own neighborhood, complete with people, pets, various types of houses, streets, parks, stores, public buildings, pizza parlors, and video arcades. Starting with bare land, children can construct a town with ready-made houses; give Sims places to work; add city services; and plan roads, bicycle paths, and ponds; as well as plant trees, flowers, and grass. A DOS version will be released later this year. ($44.95) Maxis Corp., 2 Theatre Sq., Orinda, CA 94563-3346. 1-800-526-2947.



# Macintosh Software Review

## Maxima 3.0

**Published By:** Connectix

**List Price:** $99

**Reviewed By:** Matthew Leeds

The wizards at Connectix have taken a great RAM disk program, Maxima, and made it even better in this revised version. They have added RAM

*continued on page 206*


# COMPUTER LIQUIDATION CENTER

## 714/895-5802
FAX: 714/897-9498

UP TO 75% OFF SUGGESTED RETAIL

BLOWOUT MODEL 256 GRAY SCALE SCANNERS
DEXXA Scanner (Made by Logitech)
256 Gray Scale
4 Inch Wide, 400 DPI
Includes: Gray Touch & Fototouch
Supports DOS & Windows
Qty. 1 ..... $49.95
Qty. 50+ ..... $39.95

LOGITECH SCANMAN MODEL 256 TRUE GRAY SCALE SCANNER
√ 4" Wide, 400 DPI
√ Fototouch Image Software
√ Autostitch For Automatic Full Page Scanning!
$95

| End Users: | Comp USA, Fry's, Micro City Prices | OUR PRICE |
|---|---|---|
| Trackball Stationary | ~~'77~~ | '55 |
| (High Performance Mouseman) | | |
| Trackball Portable | ~~'77~~ | '15 |
| Logitech First Mouse | ~~'39~~ | '25 |
| Logitech Mouseman | ~~'69~~ | '35 |
| Logitech 3 Button Serial | ~~'29~~ | '15 |
| Logitech 3 Button PS/Serial | ~~'24~~ | '12 |
| Logitech Bus Mouse | ~~'99~~ | '45 |
| Logitech Mouseman Cordless | ~~'89~~ | '59.95 |

MARCH SPECIAL!

ATTN: AST POWER EXEC NOTEBOOK OWNERS
CONVERT YOUR MONO POWER EXEC DISPLAY TO PASSIVE COLOR DISPLAY $395 - INSTALLED!
(w/Trade-in)
THIS OFFER EXPIRES END OF MARCH!!

AST

AST NOTEBOOKS
• 486/25 PASSIVE COLOR
4 Meg RAM, 200 Meg HD
2 PCMCI Slots, DOS & Windows $1395
• 486/33 ACTIVE COLOR
4 Meg RAM, 200 Meg HD
2 PCMCI Slots, DOS & Windows $2195
• 486/25S AST BRAVO
4 Meg RAM, 120 Meg HD, Mono $995
90 DAYS CLC WARRANTY

AST PARTS:

| | |
|---|---|
| 4 Meg RAM For Premium Exec/Power Exec | $195/195 |
| Battery Premium Exec/Power Exec | $45/65 |
| Keyboard Premium Exec/Power Exec | $35 |
| AC Adapter Premium Exec | $75 |
| External Battery Charger | $35 |
| Trackball Power Exec | $45 |
| Fax Modem S/R Premium Exec | $95 |
| PCMCI Power Exec 24/96 | $75 |
| SVGA N.I. Color Monitor, .28 | $225 |
| AST Docking Station For Power Exec Notebook | $295 |
| Power Exec Car Adapter | $65 |
| Power Exec AC Adapter | $55 |
| Pen Exec Battery | $65 |

FOR OTHER AST PARTS PLEASE CALL!

MISCELLANEOUS:

| | |
|---|---|
| US Robotics - 2400 Ext | $15 |
| US Robotics - 9600 Ext | $50 |
| OS2 2.0 | $10 |
| Logitech Catchword Pro | $65 |
| Carrying Case for Notebook & Printer - Both | $20 |
| Labtec Speakers 1 p/Set Model #CS-550 | $10 |
| (Qty. 100+ Retail Pkg. - $7.95) | |

YOUR #1 AST SPARE PARTS DISTRIBUTOR IN SOUTHERN CALIFORNIA

To Order, Please CALL in Advance. We Accept Will Call Only. We Will Gladly Ship All Orders To You. Thank You.
5332 Industrial Dr., Huntington Beach, CA 92649
HOURS: M-F 9 a.m. to 5 p.m.
Prices & Availability Subject To Change.



# NOVELL CLASSES

*Get Long Term Results in the Short Run*
*Lowest Cost in Southern California*

- Certified NetWare Administrator
- Certified NetWare Engineer
- Enterprise Certified NetWare Engineer

√ Classes Start Bi-Weekly
√ All the Classes You Need for Certification

Now Offering 3.x to 4.x Upgrade Classes

*Days, Evenings and Weekends*

We Offer

MICRO HOUSE

- Guaranteed Small Classes
- Experienced Novell Instructors
- Guaranteed Repeat Policy
- Micro House Technical Library for Each Student

Novell Certified NetWare Engineer

Call Today
(714) 257-3095 • (800) 900-8848

VISA MasterCard DISCOVER

SEA
Software Education of America, Inc.
*Southern California's Leading Software and Network Training Company*
265 S. RANDOLPH AVE. #J190, BREA, CA 92621

# NOTEBOOK EXPRESS

## AAPOGEE CD5000

- Dual Scan/TFT LCD Display
- 486DX2-50 to DX4-100
- 4MB RAM (32MB Max.)
- 250MB-800MB Hard Disk
- 2.5" 1.44MB Floppy
- PCMCIA Type II & III
- Dual Speed CD-ROM
- 16 Bit Stereo Sound
- LB Video w/1MB
- Versa Point Mouse
- 12 CD Titles Bundle
- DOS or Windows Package

## AAPOGEE MN3100

- Mono/Dual Scan/TFT LCD Display
- 486DX2-50 to DX4-100
- 4MB RAM (32MB Max.)
- 250MB-800MB Hard Disk
- 2.5" 1.44MB Floppy
- PCMCIA Type II & III
- Battery Overcharge Protection
- Carrying Case
- Integrated Trackball
- DOS or Windows Package

## AAPOGEE MD4000

- Mono/Dual Scan/TFT LCD Display
- 486DX2-50 to DX4-100
- 4MB RAM (32MB Max.)
- Removable 250MB-800MBHDD
- Removable 1.44MB FDD
- PCMCIA Type II & III
- Local Bus Video Display w/1MB RAM
- 16 Bit Stereo Sound
- Track Point Mousing
- DOS or Windows Package

**AAPOGEE**
NOTEBOOKS OF THE FUTURE

**CALL FOR THE LOWEST CURRENT PRICES!**

## NOTEBOOK EXPRESS SERVICE

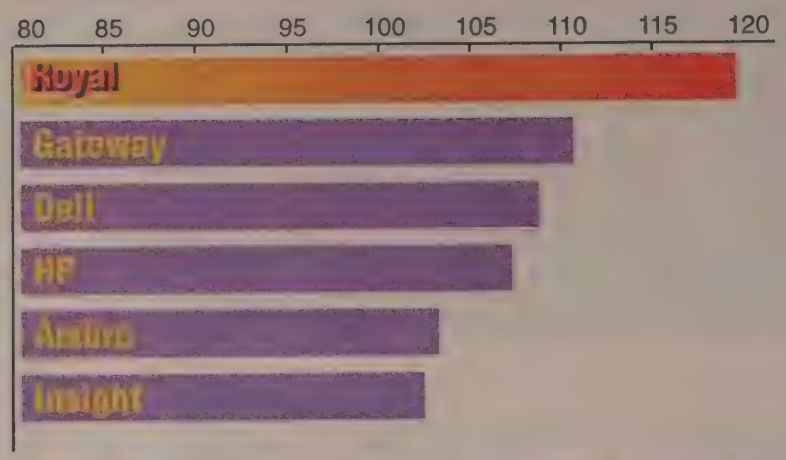
UPGRADES
REPAIR
MEMORY
HARD DRIVE

★ ★ ★ ★ ★
AMERICAN INSIGHT

Financing & Leasing Plans Available. Call for Details.
VISA MasterCard
OPEN SATURDAYS 10:00-4:00

600 Monterey Pass Road, Monterey Park, CA 91754
Tel (818) 300-8116 Fax (818) 300-0981

## Greater Performance and Features




**TOP Rated Performance**

*PC Magazine rates Royal tops in performance (September 27, 1994). Once again, our lead in new technology puts us ahead of the game. Ahead of Gateway. Ahead of AST. Ahead of Hewlett Packard. Ahead of Dell, Micron, Ambra, and a host of others.*

*So why bother with last year's stuff when you can have the latest? At Royal, we bring you the latest technology at the most affordable prices, month after month, thereby ensuring your long-term satisfaction. Check our specifications against the other top-tier companies. You'll find us to be strong contenders, with the latest Enhanced IDE and Wide SCSI hard drives, a no-skimp 512K external cache standard, the latest 64-bit video, 4X CD-ROMs, respected name brand sound cards, voice recognition, and award-winning monitors. Give a friendly sales rep a call, and let us outfit you with the best of the latest.*

PC MAGAZINE

Sept. 27, 1994

*"...This combination should satisfy most users–especially those who need to run high-end Windows graphics software..."*

## Royal Media Voice-Powered PCI

- **8MB** RAM, upgr. to 128MB
- 256K write-back cache
- **730MB** Enhanced IDE HD
- **PCI Enhanced IDE** controller
- **15" KFC digital flatscreen,** low radiation, 1280 x 1024 - ***Byte "Best Value" Award!***
- **ATI mach64 PCI 2MB RAM - *PC Magazine Editor's Choice***
- **4X CD-ROM drive 600KB**/sec
- **Orchid Soundwave Pro 32, Digital Signal Processing 32-voices** sound card, 2 speakers
- Voice Recognition **software and mic.**
- **14 Multimedia CD titles**
- 1.44MB & 1.2MB FDD, Hi-res mouse
- 2S-1P-1G ports, 101 enh. keyboard

i486DX4-75 .....*$1895*
Pentium™-75 .....*$2145*
Pentium™-90 .....*$2395*
Pentium™-100 .....*$2545*

# NEW! 4X CD-ROM and TALK TO ME

## Media Master 4X 16MB RAM/730HD PCI

- **16MB** RAM, upgr. to 128MB
- 256K fast write-back cache
- **850MB** Enhanced IDE IO
- **PCI Enhanced IDE** controller
- **15" MAG digital flatscreen,** low radiation, 1280 x 1024
- **ATI mach64 PCI 2MB RAM - *PC Magazine Editor's Choice***
- **4X CD-ROM** drive **600KB**/sec
- Voice recognition **software & mic.**
- **Sound Blaster AWE 32, 14 CD titles**
- 7 bay tower, enhanced 101 keyboard
- 1.44MB FDD, Hi-res mouse, 1P-2S-1G

i486DX4-75 .....*$2245*
Pentium™-75 .....*$2495*
Pentium™-90 .....*$2745*
Pentium™-100 .....*$2895* ✔

17" flatscreen upgrade.....add $325
32MB upgrade .....add $395

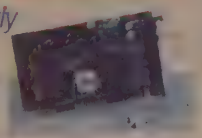
**One Year Labor Warranty**
**Lifetime Tech Support**
**One Year Parts Warranty**

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.
Prices reflect 3% cash discount.
The Intel Inside Logo is a registered trademark of Intel Corporation.

## FAST 64-bit Video

*Zip through screen redraws with champion speeds. The amazing new ATI mach64 video 2MB RAM card, with ATI's newest 64-bit processor, achieves up to an incredible 42 WinMarks or more in Windows 3.11! (Winbench ver4.0)*

## TRUE Sound 16-bit DSP



*PC Magazine recently called it "the perfect sound card" for today's PC. Compatibility with all major sound standards, speech recognition, digital signal processing (DSP) for high fidelity sound at up to 20 million instructions per second, and true 16-bit record and playback. Plus MIDI, "special effects" like Q-Sound ("surround sound") and reverb, for audio realism so surprising you'll call it "True Sound".*

## 4 PCI Slots

*Whereas most PC makers give you only 2 or 3 PCI slots on their motherboards, Royal gives you 4 PCI slots. That means you'll have 2 open 32-bit PCI slots for future uses, like networking, additional controllers, and other future high-end PCI cards. And Royal's roomy cases means many open slots and bays for add-on cards and drives of all kinds!*

## 4XCD-ROM Drive

***With quadruple the processing power, 4X CD-ROM drives give you** fast data transfer rates – up to 600KB/sec – for even-running, full motion video without "the shakes." Quadspeed CD-ROMs are nearly twice as fast as a triple-speed CD-ROMs.*

## MultiMedia CD Bundle

*Royal bundles 14 sound- and action-packed CDs for your personal enjoyment. Includes games, entertainment, presentation software, and complete multimedia encyclopedia.*

## Voice Recognition System

- *Hardware, mic & software included*
- *Runs in memory, under applications*
- *Frees hands for typing*

### FACT FILE

**Royal Media Master IV**

| SUITABILITY TO TASK | |
|---|---|
| Windows applications | EXCELLENT |
| DOS applications | GOOD |
| Expandability | EXCELLENT |

Ratings based on PC Magazine's "Pentium Powerhouses" review of forty 90MHz Pentium systems.

Sept. 27, 1994

intel inside

# ROYAL TRUE SOUND!

## Royal Media III PCI, 4X-CD 64-bit Video

- **8MB** RAM, upgr. to 128MB
- **256K fast secondary cache**
- **730MB** Enhanced IDE HD
- **PCI Enhanced IDE** controller
- **15" SVGA NI** flatscreen monitor, 1280
- **4X CD-ROM** drive **600KB/sec CD deluxe titles**
- **Orchid Gamewave 32 sound card,** Digital Signal Processing, 2 speakers
- 7 bay tower, enhanced 101 keyboard
- Hi-res mouse, 1P-2S-1G, 1.44MB FDD

| | |
|---|---|
| i486DX4-75 | *$1645* |
| Pentium™-75 | *$1895* |
| Pentium™-90 | *$2145* |
| Pentium™-100 | *$2295* |
| Orchid Soundwave Voice | add $145 |
| ATI mach64 2MB | add $125 |

## Media Express PCI, 2X-CD, DSP Sound

- **8MB** RAM, **upgradable**
- 256K fast write-back cache
- **540MB** IDE PCI HD Controller
- **15" SVGA NI** flatscreen monitor, 1280
- **Royal 64 bit video PCI accelerator,** 1MB RAM **(2MB** upgradable)
- **Double-spin CD-ROM,** Photo CD compatible, 300 KB/sec
- 16 bit Sound Blaster Pro compatible sound card, 2 speakers, 4 CD titles
- 1.44MB 3.5" FDD
- 101 Key enh. keyboard
- Choice of desktop or mini tower
- Hi-res mouse, 1P-2S-1G

| | |
|---|---|
| i486DX4-75 | *$1545* |
| Pentium™-75 | *$1745* |
| Pentium™-90 | *$1945* |
| 14 CD titles upgrade | add $65 |
| Orchid Gamewave DSP sound | add $45 |
| 1.2 Floppy Disk, 5 1/4" | add $45 |
| CD-ROM (4X) | add $95 |

## Designer Pro-17 PCI Professional

- **16MB** RAM, upgr. to 128MB
- 256K cache, upgradable to 512KB
- **850MB** Enhanced IDE HD
- **Enhanced IDE** PCI HD Controller
- **Award winning 17" MAG Digital Flatscreen** - Energy Star
- **ATI mach64 PCI 2MB** RAM, ***PC Magazine Editor's Choice***
- **Double-spin CD-ROM**
- 1.44MB 3.5" floppy disk drive
- 101 Key enhanced keyboard
- 7 bay tower, dual fans
- Hi-res mouse, 2S-1P-1G

| | |
|---|---|
| i486DX4-75 | *$2095* |
| Pentium™-75 | *$2345* |
| Pentium™-90 | *$2595* |
| Pentium™-100 | *$2745* |
| Upgrade to Nanao 17" flexscan | add $395 |
| 4X CD-ROM | add $95 |

## Designer Pro-15 PCI

- **8MB** RAM, upgr. to 128MB
- 256K fast secondary cache
- **730MB** Enhanced IDE HD
- Enhanced IDE PCI HD controller
- **15" low radiation flatscreen,** 1280
- **Royal 64 bit video** PCI accelerator, 1MB RAM (**2MB** upgradable), 1280
- 1.44MB 3.5" floppy disk drive
- 101 key enhanced keyboard
- 7 bay tower dual fans
- 2 Serial, 1 parallel, 1 game port
- High resolution serial mouse

| | |
|---|---|
| i486DX4-75 | *$1345* |
| Pentium™-75 | *$1595* |
| Pentium™-90 | *$1845* |
| Pentium™-100 | *$1995* |
| 17" flatscreen upgrade | add $365 |
| CD-ROM (2X) | add $135 |

## 2 LOCATIONS TO SERVE YOU:

**Corporate P.O. Accepted!** *To order or for more information, please call:*

**Royal Electronics**
1208 John Reed Court, Industry, CA 91745
**818.855.5077**
Fax Orders 818.330.2717

**Alpha Computer**
10353 Balboa Blvd., Granada Hills, CA 91344
**818.831.5585**

# MultiMedia & BEYOND

For the latest CD-ROM and software news & reviews, see our
Product Spotlight section starting on page 120

## In This Section:


- Amiga
  Optimism Abounds At
  Video Toaster Expo '94 .....174
- New Forms Of
  Virtual Reality
  QTVR & VTV .....184
- Tools For Creating
  Believable Animation
  Autodesk 3D Studio
  Release 4 .....194


AMIGA

# Optimism Abounds At Video Toaster Expo '94

Avid Media Group, publishers of *Video Toaster User* magazine, hosted the first Video Toaster Expo at the Universal City Hilton & Towers, December 14 and 15. Along with a wide variety of Video Toaster and LightWave 3D training seminars, the show featured an exhibit floor with over fifty third-party developers and other support companies. Qver three thousand people attended this mid-week event, indicating a continued strong interest in the Amiga/Video Toaster platform.

## FAMOUS FACES

Expo attendees included many recognizable faces. Of course, *VTU* Editor-in-Chief Jim Plant and Managing Editor Doug Carey were present and very busy keeping things going. Other attendees I saw included John Gross and Taylor Kurasaki from Amblin Imaging, Tim Jennison, Donetta Colboch, Lee and Kathy Stranahan, Bob Anderson, Brad Carvey, Alan Hastings, Stuart Ferguson, and a crew of others from NewTek. A very special thanks and congratulations to *VTU*'s Ann Pulley, who was the major force in getting the show to come off as well as it did. (My apologies to the tons of others I'm sure I missed or didn't recognize.)

The day began with a keynote speaker address by NewTek President Tim Jennison. He didn't offer any news about the future of the Amiga; however, he did have some interesting things to say about NewTek. Jennison indicated that the Flyer and LightWave are the company's future. Without being too specific, he indicated that the Flyer depends very little on the host machine (i.e., Amiga). Considering that LightWave is totally platform-independent, the conclusion is obvious. Apparently, NewTek is not as dependent on the Amiga as people might think.

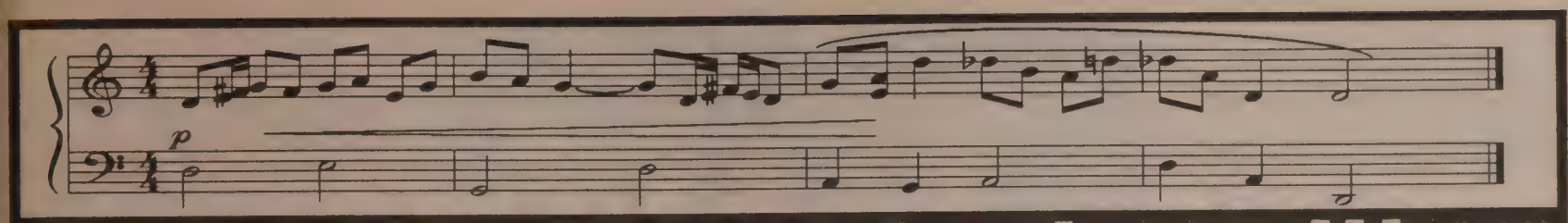
***Video Toaster User*** **Editor-in-Chief Jim Plant and NewTek marketing director Donetta Colboch**

## FLYER FINALLY FLIES

Demo Flyers supposedly started shipping in limited quantity to dealers in November. People who pre-paid to reserve a Flyer will be given the option of getting one with ".9" software. This is a pretty solid version, but not final. The final version will be a free upgrade and will supposedly ship by the time you read this. This will coincide with the 4.0 Toaster (and I'm assuming LightWave 3D) upgrade.

NewTek is being very secretive about what hard drives will work. I've even heard that they may have to sell "Flyer approved" drives themselves. Apparently, hard drives differ in performance, even if they are the same model from the same manufacturer.

BY DOUGLAS J. NAKAHARA



# Make Music with Your Computer!

## NAMM

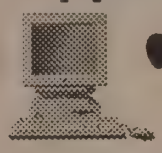
Want to see the newest products? Come by our store. Watch our NAMM show video!

**SHOW VIDEO**

## Roland

EP7II Digital Piano
$999
E36 Intelligent Synth
$950
JV-35 Synth w/$600 acces
$989

## Apple® Passport®



Music Starter System

Quadra 630 4/160sys
EZ Music Starter Kit:
Book of Midi
EZ Vision
Band in a Box
Interface
Peavey DPM2
260 Drum Patts
Installation
Training Included

$2299

Complete with Velocity, Multitimbal Keyboard

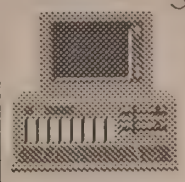
SAVE $1300!

## General Music SX $2495

Multimedia Workstation

376 ROM Sounds
250,000 note sequencer
Battery Backed Seq Ram
Record Tempo Changes
96 Styles
32 User Styles + Varations
Lyric/Score display

## PC Turtle Beach systems Roland



Monterey Midi System

486DX-66 CPU
1meg video
1024x768 monitor
340mgHD
keyboard
mouse
Windows 3.1
Fatar st49 key
Quad
Cakewalk Win
Installation & Training

$2599

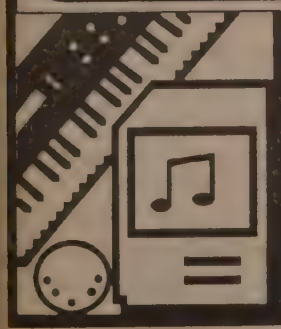
Plays 4 Tracks of Digital Audio w/4 meg rom of Sample Sounds w/ EFX!

## *The Latest Products & Largest Inventory of Music Software!*

| | | |
|---|---|---|
| Voice to Midi Convtr $150 | Midi Interfaces from $25 | Mac/PC Session In Stock |
| Finale 3.0 Win upgrd $99 | Noatation Prgm from $50 | |
| Roland Snd Canvas DB | Peavey DPM 3se $1695 | |
| Roland RAP-10 $299 | Midi Help Videos from $10 | |
| Over 100 Midi Help Books! | General Midi Files from $12 | |
| Dr Synth & SCC1 Sale | Turtle Beach Maui In Stock | |
| Cakewalk Home ST $99 | SAW 8 Track softwr $499 | Apple PowerMac 6100-66 SALE $1599 |
| Band in a Box Pro $69 | Atari Falcon 030 $799 | |
| PowerTracks Seq $29 | Roland JV880 $599 | |
| MusicTime $109 | Passport Encore/MTPro $399 | DAT to CD MASTER $50 Call for Details |
| Dr. T QuickScore $59 | Quad 4 track softw $sale | |

## 9 REASONS TO PURCHASE FROM US:

1. FREE Phone Support on Products purchased from us.
2. EZ Financing & Leases
3. Over 1000 Midi Programs!
4. Private Tutoring in your home or studio by the experts
5. FREE Monday Nite Midi Introduction Seminars
6. Notation & Sequencer Classes Performer & Vision starting Soon
7. Finale User Grp meet 4th Wed
8. Midi/Music BBS (818)789-4287
9. Computer Swapmeet in Pomona Mar 4,5



# The Electronic Music Box

## 14947 Ventura Blvd. Sherman Oaks

## (818) 789-4250

## AMIGA *continued...*

So where's my Flyer review unit? Well, I posed that very question to NewTek marketing director Donetta Colboch. Apparently, the first batch of boards are going out to dealers and people who have actually paid for them. But, I am "on the list" and I should get one at some point.

### LIGHTWAVE Q&A

Also on the agenda for the day I attended was a Q&A session with LightWave programmers Alan Hastings and Stuart Ferguson. It's hard to believe that these two regular-looking guys single-handedly wrote the program that is revolutionizing computer graphics.

The big news for the next version of LightWave is "plug-in technology." This allows any developer to tie external programs into LightWave as if they were part of LightWave itself. To make this feature as powerful as possible, they got input from developers already doing plug-ins for programs like PhotoShop and 3D Studio and found out what they liked and what would make things easier. Hastings was very frank in saying that the people doing these types of things would be able to take LightWave farther than he ever could.

If there's good news for Amiga users in this cross-platform movement, it's that LightWave will remain totally compatible across platforms. If you make a scene file or object on an SGI, you can load and render it on your Amiga. Hastings and Ferguson use a single body of code as the basis for all of the versions, which should guarantee compatibility. Plug-ins, unfortunately, will apparently have to be platform-specific.

### FAST RENDERING

Several developers showed Windows NT machines equipped with 275MHz DEC Alpha CPUs. Carrera Computers has one based on a DEC motherboard. Aspen and Flight Technologies also had DEC Alpha systems, based on Aspen motherboards. (If you are really daring, you can actually purchase an Aspen motherboard separately and piece together your own system. Personally, I think you'd be better off buying a configured system, considering price, hardware compatibility headaches, and system support.) Prices hovered around $10,000, but that's for a complete system with 32 to 64MB of RAM and a 1GB hard drive.

Currently, with respect to LightWave, all of these DEC Alpha-based computers are only being used as rendering engines for an Amiga running LightWave, via ScreamerNet. However, NewTek will soon be shipping a native Windows NT version of LightWave for the DEC Alpha chip, eliminating the need for an Amiga or ScreamerNet. The great thing about these speed demons is that they can function as regular PCs too! You can run 16-bit Windows programs as well as native DEC Alpha Windows NT programs.

Not to be outdone, DeskStation Technology announced the Raptor III. The big news about this machine is that the CPU is on a daughtercard (*a la* Amiga 4000) so it can be upgraded to MIPs, DEC Alpha, and PowerPC CPUs. This may minimize the fears of obsolescence; however, I have yet to see such a feature work in reality, since so many other things change beside the CPU.

#### RESOURCES:

**Aspen Systems**
(303)431-4606

**AVID Media Group**
(408)774-6770

**Blevins Enterprises, Inc.**
(208)885-3805

**Carrera Computers, Inc.**
(714)707-5051

**CD Solutions**
(510)820-5400

**DeskStation Technology**
(913)599-1900

**Elastic Reality**
(608)273-6585

**Flight Technologies, Inc.**
(816)525-8359

**Feral**
(913)831-1791

**FOCUS GbR**
(212)826-1240

**InnoVision Technology**
(510)638-0800

**Interworks**
(909)699-8120

**L.A. Video Toaster User Group**
(818)552-5025

**NewTek, Inc.**
1-800-847-6111

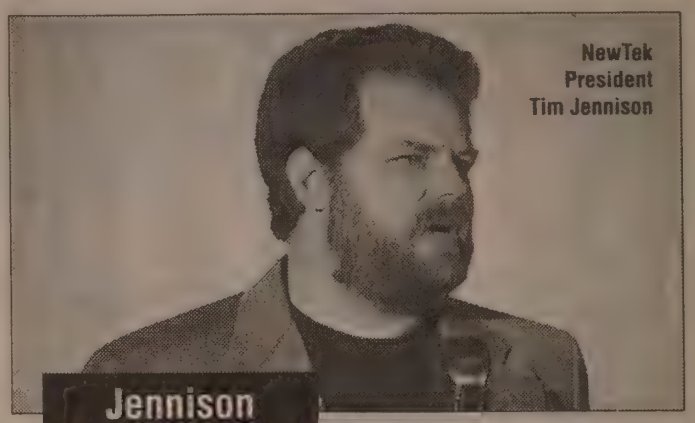
**NoahJi's**
(303)499-1975

**Nova Design**
(804)282-5868

**PreVue Technologies**
1-800-356-8863

**Questar Productions**
(303)659-4028

**Silent Paw Productions**
(703)330-7290



NewTek President Tim Jennison

**Jennison indicated that the Flyer and LightWave are NewTek's future. Considering that LightWave is totally platform-independent, the conclusion is obvious. Apparently, NewTek is not as dependent on the Amiga as people might think.**

### AMIGA IN MOTION

VLab-Motion, distributed by NoahJi's, is a hot JPEG-based nonlinear digital editing system for the Amiga. It has Y/C as well as composite inputs and outputs, plus an optional expansion module for digital component input/output. No TBC is required. The graphical interface allows you to create videos using cut-and-paste and drag-and-drop editing functions. Transitions are all rendered, but they were completed pretty quickly. There are also several "ADPro"-like effects that can be applied to clips of video.

The quality of the output is totally based on the capabilities of your Amiga; therefore a fast SCSI II interface with a very fast hard drive is highly recommended. The more data you can pump through your machine, the better the output. Sixteen-bit audio is provided by the Toccata sound board product, which supposedly will handle 256 layers of audio!

### NEW AMIGA?

NoahJi's announced plans to ship an AmigaOS-compatible workstation called DraCo, based on the Motorola 68060. Features include Fast SCSI II, dedicated 32-bit interfaces for Retina BLT and VLab Motion, five Zorro II slots, triple-speed CD-ROM, and 4MB RAM expandable to 128MB. It will reportedly be compatible with all Amiga hardware and software that is not dependent on the Amiga custom chipset, and capable of 2:1 JPEG! It should be available by mid-1995 and cost about the same as a comparably equipped A4000.

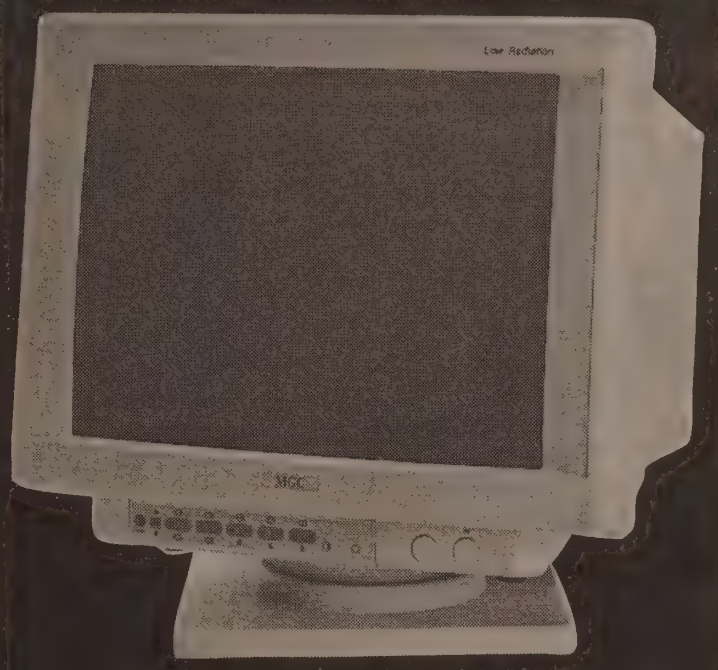
### GOOD CONNECTIONS

I was also quite impressed with Interworks' T-Net product. This is a distributive rendering software package that runs on the company's Ethernet-based peer-to-peer network, ENLAN-DFS. (It will also support ScreamerNet systems.)

T-Net will administer rendering multiple LightWave 3D scenes among several machines. You can even identify specific frames to render. There are also provisions to adjust resolution, anti-aliasing level, raytracing options, etc. right from the interface.

# MGC®

## With the Most Intelligent Graphic Mode Control



### MGC-1765VAF 17"

| dot pitch | resolution | vertical sync. | horizontal sync. |
|---|---|---|---|
| 0.26mm | 1280 x 1024 | 50-100Hz | 30-65KHz |

## TWO YEARS PARTS & LABOR WARRANTY

**Theta Computer Corp. of America**
(310) 572-1613
**Software One**
(818) 854-4066
**Micro City**
(619) 689-0660
**High Tech Supply, Inc.**
(405) 843-4873

Earth and your health were the most important concerns our engineers had when making MGC monitors. This 17-inch, state-of-the-art, high resolution monitor delivers clear, rich images at an affordable cost for desktop publishers, as well as for today's demanding business and game applications. It has a power management system which complies with EPA Energy Star and VESA Display Power Management Signaling (DPMS) guidelines. This monitor also complies with the Swedish MPRII (low radiation) for better eye protection.

EPA POLLUTION PREVENTER®

This 17-inch monitor has advanced features and roomy displays. You get premium graphics with a fine 0.26mm dot pitch and a non-interlaced maximum resolution of 1280 x 1024. The screen is also non-glare and anti-static. So you are able to enjoy a larger and sharper picture with minimum eye fatigue!

ISO-9000 Certified

How many times have you tried to adjust your screen in order to see the whole picture and later on you have to do it again for different programs? The 17-inch monitor is equipped with 21 programmable modes for different settings. There are 12 factory presets and 9 custom defined programmable modes. The monitor will detect the setting for the programs you want to run, and save you time and frustration in the future from constant screen adjustments.

2 YEARS PARTS & LABOR WARRANTY

With the flat screen tube design, light reflection disturbances and other distortions common in regular monitors, are eliminated to provide a sharper and more comfortable image.

MPR-II (low radiation)

MGC is committed to bringing you the highest quality monitors with the most affordable prices you will find in this vast market. So, call a local distributor for more information on 14-, 15- and 17-inch monitors.

# IT COMPUTER

8 YEAR CELEBRATION!

- WE NEVER CLOSE
- OPEN 7 DAYS A WEEK
- WE HAVE BRAND NAMES & BEST PRICE

(Corner Harbor & Heil) 16540 Harbor Blvd., Suite #6,
Fountain Valley, CA 92708
Tel: (714) 775-8126 Fax: (714) 775-0679
Customer Service: (714) 775-0648

intel inside **HOT SAVINGS!** pentium

**486DX2/66MHz**
Intel CPU, 256K Cache
Mid Tower Case
4MB RAM
1.44 TEAC
540MB Hard Drive
VL/IDE 2S/P/G Port
VL/VGA Card
14" .28 N.I. VGA Monitor
101 Enhanced Keyboard
High Res. Mouse
$995

**PENTIUM 90MHz**
Intel CPU 256K Cache
Mid Tower Case
4MB RAM
1.44 TEAC
540MB Hard Drive
PCI/IDE 2S/P/G Port
PCI/VGA 1MB
14" .28 N.I. VGA Monitor
101 Enhanced Keyboard
High Res. Mouse
$1695

**UPGRADE:**
14.4 Fax & Modem '69
Multimedia Kits '219
Memory 4MB '139

**CASE/POWER SUPPLY**
Compact Mid Case ..... '42
Mid Tower Case ..... '53
Desktop Case ..... '41
Motherboard & CPU
486SLC/66MHz ..... '63
486SLC/VL/66MHz IBM ..... '159
486DX2-66MHz Intel ..... '285
Pentium 66MHz ..... '665
Pentium 90MHz ..... '855

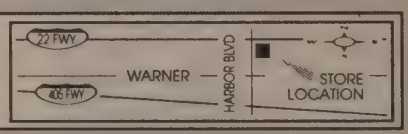
**CONTROLLER/VIDEO**
IDE & I/O ..... '11
VL/IDE & I/O ..... '18
SCSI II Future Domain ..... '128
PCI/IDE ..... '29
Trident VL Bus 1MB ..... '65
Trident PCI 1MB ..... '85
Diamond Stealth 2MB ..... '195
S3 VL Bus ..... '72
VL Bus SCSI ..... '149

**HD/FD DRIVES**
TEAC 1.2 ..... '39
TEAC 1.44 ..... '31
Safronic 1.44 ..... '28
365MB Quantum ..... '165
540MB Quantum ..... '229
560MB Samsung ..... '209
730MB ..... '289
1.08GB Quantum ..... '475
Colorado/Tracker ..... '279

**CD ROM**
DOUBLE
Panasonic ..... '139
Sony ..... '119
NEC SCSI ..... '149
TRIPLE
NEC 510 3x ..... '249
QUAD
TEAC 4x ..... '289
Toshiba 3501 ..... '389

**BAREBONE SYSTEMS**
Mid Tower/IDE Ctrl./1.44 FD/Keyboard
486SLC/33MHz '175
486SLC/66MHz (IBM) '270
486DX2/66MHz (Intel) '385

16540 Harbor Blvd.,
Suite G
Foutain Valley, CA
92708




**MONITOR REPAIR**
**VGA $65 - PARTS & LABOR**
**(714)775-0648**




AMIGA *continued...*

Jim Plant

You get extensive real-time information about rendering activity and statistics. T-Net will even send messages to alphanumeric pagers on rendering status and problems. It is highly configurable as to who it should page in different situations, as well as backup pagers to notify.

T-Net also features the ability to remotely control any of the nodes from a single Amiga. It was surprisingly quick, though not as fast as actually working on the remote machine. Interworks was also showing its PCMCIA Ethernet adapter for the Amiga 600 and 1200. In fact, they had an A1200 as part of their demonstration T-Net rendering farm.

## OTHER COOL STUFF

Alpha Paint from Innovision Technology has convinced me that you really can do nice work, painting on a composite monitor. Using the Toaster framestore buffer for the video output, Alpha Paint provides 24-bit real-time paint tools with a powerful 12-bit alpha channel. The product's anti-aliasing, compositing, and auto-drop shadow abilities were very powerful based on the demonstration I saw.

Silent Paw Productions was there touting its PAWS (Personal Amiga Workstation) kit, which allows you to transplant the guts of a 1200, 3000, or 4000 to a portable computer case. The company showed a prototype housed in a clear plastic case and indicated that the product will be available in April 1995. They estimate that a standard two-hour battery will yield about 1.25 hours—remember, the Amiga was meant to be plugged into the wall and was designed to be energy efficient.

ImageFX 2.0 was being shown at the Nova Design booth. This new release looks to be a major upgrade to an already powerful image processing program. One of the missing elements that's often kept me from using ImageFX was the lack of a good batch processing program; this may be a thing of the past with the included AutoFX batch processor. Some of the other new features are thumbnail images for previewing, unlimited buffers and brushes, new region controls, enhanced text handling, better compositing, more effects and image processing tools, new format support, and improved painting capabilities.

A 3-D digitizing system for LightWave called VertiSketch was being demonstrated by Blevins Enterprises. The Model I10, which I saw, has a robotic-like arm with a pointer on the end. The device can triangulate the location of the tip of the pointer in 3-D space. The points appear right in the LightWave Modeler display and the polygons are automatically built.

This seems a somewhat tedious chore, but compared to the same task done freehand, it's quicker and more accurate. All of the

# COMPUTER PARTS

**HARD DISK SPECIALS**
540MB $199.97
Mode 3 Enh IDE · 16ms Access Time
850MB $299.97
Mode 3 Enh IDE · 16ms Access Time
1.08GB $399.97
Mode 3 Enh IDE · 10ms Access Time

**IBM 486SLC2-66**
VLB MOTHERBOARD w/CPU
128K CACHE
$169.97

**ATI mach64**
PCI SVGA ACCELERATOR/1M
$139.97

**Conner 420MB**
INTERNAL TAPE BACKUP
$179.97

**486DX2-66 VLB**
VLB MOTHERBOARD/CPU
256K CACHE
$269.97

**Sony 2X CD-ROM**
250ms Access · 342K/s Transfer
256K Cache · IDE Interface
$109.97

**Teac 4X CD-ROM**
195ms Access · 600K/s Transfer
SB MCD Interface
$199.97

## MOTHERBOARDS

| | |
|---|---|
| Intel Plato Pentium 90 PCI 256K (No CPU) | 329 |
| OPTI Pentium 90/100 PCI/VLB 256K (No CPU) | 229 |
| Pentium 90/100 PCI 256K (No CPU) | 199 |
| Pentium 60/66 PCI 256K (No CPU) | 179 |
| 486DX2 PCI/VLB 256K (No CPU) | 139 |
| 486DX2 VLB 256K (No CPU) | 89 |
| IBM 486SLC2-66 VLB 128K (w/CPU) | 169 |

## CPU/MEMORY

| | |
|---|---|
| Cyrix 486DX2-50MHz | 119 |
| Cyrix 486DX2-66MHz | 159 |
| Intel 486DX2-66MHz | 179 |
| Intel Pentium 60MHz | 419 |
| Intel Pentium 90MHz | 599 |
| Intel Pentium 100MHz | 899 |
| 486 CPU Cooling Fan | 9 |
| Pentium CPU Cooling Fan | 19 |
| Memory - All Types | CALL |

## VLB GRAPHICS CARDS

| | |
|---|---|
| ATI mach32 Graphics Wonder VLB 1M | 119 |
| ATI mach64 VLB 1M | 139 |
| ATI mach64 VLB 2M | 199 |
| ATI mach64 VLB 2M VRAM | 279 |
| ATI mach64 VLB 4M VRAM | 479 |
| Diamond Stealth 64 VLB 1M (2M-Add $60) | 139 |
| Trident 9400 VLB SVGA 1M | 69 |

## ISA GRAPHICS CARDS

| | |
|---|---|
| Trident SVGA 512K 16-bit ISA | 39 |
| Trident SVGA 1M 16-bit ISA | 59 |

## PCI GRAPHICS CARDS

| | |
|---|---|
| ATI mach32 Graphics Wonder PCI 1M | 129 |
| ATI mach64 PCI 1M | 139 |
| ATI mach64 PCI 2M | 199 |
| ATI mach64 PCI 2M VRAM | 279 |
| ATI mach64 PCI 4M VRAM | 499 |
| Diamond Alpine 64 PCI 1M (2M-Add $60) | 139 |
| Diamond Stealth 64 PCI 1M (2M-Add$60) | 139 |
| Diamond Stealth 64 PCI 2M VRAM | 279 |

## MONITORS

| | |
|---|---|
| KFC 1511 15" Flat SVGA Non-Interlaced 0.28 | 279 |
| MAG DX-15F 15" Flat NI 0.26/Digital | 349 |
| MAG DX-17F 17" Flat NI 0.26/Digital | 579 |
| MAG MX-17F 17" Flat NI 0.26/Digital | 699 |
| Occo 14" SVGA NI 0.28/Full Screen (SPECIAL) | 199 |
| Occo 15" Flat SVGA NI 0.28/Digital (SPECIAL) | 299 |
| Viewsonic 15 15" Flat NI 0.28/Digital | 399 |
| Viewsonic 17G 17" Flat NI 0.28/Digital | 699 |
| Viewsonic 17 17" Flat NI 0.27/Digital | 799 |
| Viewsonic 20 20" Flat NI 0.27/Digital | 1399 |
| Viewsonic 21 21" Flat NI 0.27/Digital | 1699 |

## HARD DRIVES

| | |
|---|---|
| 260MB IDE/Seagate | 149 |
| 420MB IDE/Conner or Maxtor (12ms) | 179 |
| 420MB IDE/Western Digital (Mode 3/11ms) | 189 |
| 540MB IDE/Conner, Maxtor or Quantum (12ms) | 199 |
| 540MB IDE/Western Digital (Mode 3/11ms) | 229 |
| 540MB IDE/IBM (Mode 3/10.8ms) | 229 |
| 540MB SCSI-2/Quantum (9ms) | 249 |
| 730MB IDE/Western Digital (Mode 3/10ms) | 289 |
| 850MB IDE/Western Digital (Mode 3/10ms) | 299 |
| 1.08GB IDE/Western Digital (Mode 3/10ms) | 399 |
| 1.08GB Fast SCSI-2/Conner (10ms) | 499 |
| 1.2GB Fast SCSI-2/Fujitsu (9ms) | 599 |
| 1.2GB Wide SCSI-3/Fujitsu (9ms) | 699 |
| 2.1GB Fast SCSI-2/Quantum (9ms) | 999 |

## FLOPPY DRIVES

| | |
|---|---|
| Mitsumi, NEC or Toshiba 5.25" 1.2MB | 42 |
| Mitsumi, NEC or Toshiba 3.5" 1.44MB | 32 |
| Teac 5.25" 1.2MB | 45 |
| Teac 3.5" 1.44MB | 35 |

## IDE CONTROLLERS

| | |
|---|---|
| IDE I/O (2S/P/G) 16 Bit | 13 |
| VLB IDE I/O (2S/P/G) | 19 |
| VLB IDE I/O (2S/P/G) w/Mode 3 Enh IDE | 39 |
| VLB IDE I/O (2S/P/G) w/Mode 3 & 16550 Serial | 69 |
| Caching VLB IDE I/O w/Mode 3 & 16550 Serial | 129 |
| PCI IDE w/Mode 3 Enh IDE | 29 |
| PCI IDE I/O (2S/P/G) w/Mode 3 & 16550 Serial | 69 |

## SCSI CONTROLLERS

| | |
|---|---|
| PCI NCR Fast SCSI-2 Controller | 99 |
| PCI NCR Fast Wide SCSI-3 Controller | 179 |
| Adaptec 1522BK SCSI | 129 |
| Adaptec 1542BK SCSI | 199 |
| Adaptec 2842 VLB SCSI | 269 |
| Adaptec 2940 PCI SCSI-2 | 229 |
| Adaptec 2940W PCI Wide SCSI-3 | 329 |
| VLB SCSI (up to 7 Devices) | 129 |
| VLB IDE & SCSI (up to 7 Devices) | 149 |

## SOUND CARDS

| | |
|---|---|
| Jazz 16 MCD | 49 |
| Sound Blaster 16 Multi-CD | 79 |
| Sound Blaster 16 SCSI-2 | 99 |
| Sound Blaster AWE32 (HOT!) | 249 |
| ASP Upgrade Chip for Sound Blaster 16 | 59 |

## CD-ROM DRIVES

| | |
|---|---|
| Panasonic 562 2X (320ms) (SPECIAL) | 115 |
| Sony 55E 2X IDE (250ms) | 119 |
| Mitsumi 4X IDE (195ms) | 219 |
| Teac CD-55 4X (195ms) | 219 |
| Toshiba 4X SCSI-2 (150ms) | 299 |

## FAX MODEMS

| | |
|---|---|
| 9624 Fax Modem Internal | 35 |
| 14.4 Fax Modem w/Voice Mail Internal | 69 |
| 28.8/14.4 Fax Modem Internal | 159 |
| US Robotics 14.4 Fax Modem Internal | 99 |
| US Robotics 14.4 Fax Modem External | 129 |
| US Robotics 28.8 Fax Modem Internal | 199 |
| US Robotics 28.8 Fax Modem External | 239 |

## TAPE BACKUPS

| | |
|---|---|
| Conner 250MB Internal (TAPE INCLUDED) | 139 |
| Conner 420MB Internal (TAPE INCLUDED) | 189 |
| Conner 850MB Internal | 349 |
| Conner 250MB External w/Parallel SCSI | 329 |
| Colorado 250MB Internal | 149 |
| Colorado 350MB Internal | 189 |

## NETWORKING

| | |
|---|---|
| Ethernet 16-bit Jumperless Combo (BNC/RJ) | 35 |
| Ethernet 10BaseT Hub 8 Ports | 199 |
| Ethernet 10BaseT Hub 16 Ports | 299 |

## CASES

| | |
|---|---|
| Mini Tower Case/230W UL PS (5 Drive Bays) | 39 |
| Medium Tower Case/230W UL PS (7 Drive Bays) | 59 |
| Full Tower Case/250W UL PS (10 Drive Bays) | 79 |

## KEYBOARD/MOUSE

| | |
|---|---|
| Enhanced 101-Key | 15 |
| Focus 6000 101 Key | 25 |
| Focus 9000 124 Key w/Calculator | 49 |
| Fujitsu K4700 101 Key | 45 |
| IBM 101 Key (Genuine IBM Click Feel) | 45 |
| Hi-Res 3 Button Serial Mouse | 9 |
| Microsoft Serial | 29 |

## SPEAKERS

| | |
|---|---|
| 12 Watt Amplified | 15 |
| 40 Watt Power Amplified | 39 |
| 80 Watt Super Bass Power Amplified | 59 |
| 120 Watt Super Bass Power Amplified | 69 |

## SOFTWARE

| | |
|---|---|
| Microsoft DOS6.22/Windows 3.11 (w/system) | 79 |
| Microsoft Windows for Workgroups 3.11 | 69 |

## PRINTERS

| | |
|---|---|
| Hewlett Packard Deskjet 540 (Color Kit-Add $45) | 279 |
| Hewlett Packard Deskjet 560C | 469 |
| Hewlett Packard Deskjet 1200C | 1,399 |
| Hewlett Packard Laserjet 4L | 629 |
| Hewlett Packard Laserjet 4P | 949 |
| Hewlett Packard Laserjet 4 Plus | 1,369 |

# CD TITLES

## SPECIALS THIS MONTH

| | | | |
|---|---|---|---|
| Animals | $9.97 | Iron Helix | $19.97 |
| Always Arthur | 14.97 | SimCity 2000 | $19.97 |
| The 7th Guest | 19.97 | Return to Zork | $19.97 |
| Microsoft Golf | 29.97 | Rebel Assault | $24.97 |
| Microsoft Baseball | 29.97 | Myst | $29.97 |
| Rise of the Robots | 29.97 | Sierra Outpost | $29.97 |

| | | | | | |
|---|---|---|---|---|---|
| 5 Foot 10 Pak Vol.2 (10 CDs) | 29 | Legends of Oz | 19 | **NEW ARRIVALS** | |
| 7th Guest (2 CDs) | 19 | Man Enough (2 CDs) | 25 | NEW TITLES EVERY WEEK! | |
| Aegis: Guardian of the Fleet | 25 | Mathematics Library | 19 | Cyberia | 49 |
| Ambush at Sorinor | 19 | Mavis Beacon Teaches Typing | 19 | Doom 2 | 49 |
| America Alive! | 19 | Mayo Clinic Health Book | 19 | Dracula Unleashed | 19 |
| Animals, San Diego Zoo | 9 | MegaRace | 19 | Frankenstein | 25 |
| Arthur's Teacher Troubles | 15 | Microcosm | 19 | Great Naval Battles | 25 |
| Asia Alive! | 19 | Microsoft Bookshelf '94 | 39 | Hell: Cyberpunk Thriller | 29 |
| Auto Almanac | 19 | Microsoft Cinemania | 39 | Hellcab: NYC Tourist Guide | 25 |
| Back Road Racers | 19 | Microsoft Dinosaurs | 39 | Infopedia Encyclopedia '95 | 39 |
| Barney Bear Goes to School | 19 | Microsoft Golf | 29 | Journeyman Project Turbo | 19 |
| Barney Bear Goes to Space | 19 | Microsoft Works 3.0 MM | 39 | King's Quest 7 | 49 |
| Beauty & the Beast | 9 | Monarch Notes | 19 | Legend of Kyrandia 2: Fate | 25 |
| Blue Force | 19 | MPC Wizard 3.0 | 19 | Mad Dog McCree 2 | 19 |
| Business 500 | 19 | Multimedia World History | 19 | Mayo Clinic Pharmicist | 19 |
| Business Library (12 Titles) | 19 | Nat'l Geographic: Birds | 9 | Microsoft Ancient Lands | 39 |
| Central Intelligence | 19 | Nat'l Geographic: Butterflies | 9 | Microsoft Complete Baseball | 29 |
| Children's Dictionary | 19 | Nat'l Geographic: Dinosaurs | 9 | Microsoft Dangerous Creature | 39 |
| Civilization | 19 | Nat'l Geographic: Farm Anima | 9 | Microsoft Encarta '95 | 49 |
| College Handbook | 19 | Nat'l Geographic: Mammals | 9 | Microsoft Musical Instruments | 29 |
| Compton's Int. Encyclopedia | 19 | Nat'l Geographic: Spiders | 9 | Outpost | 25 |
| Conspairacy | 19 | Nat'l Geographic: Whales | 9 | Ozzie's World | 19 |
| CyberRace | 19 | National Parks | 19 | Rise of the Robots | 29 |
| Dameon's Gate | 25 | Panzer Geberal | 25 | U.S. Navy Fighters | 49 |
| Dark Seed | 25 | Parenting | 19 | UFO: Enemy Unknown | 25 |
| Dark Sun: Shattered Lands | 25 | PC Library | 19 | Under A Killing Moon (4 CDs) | 49 |
| Day of the Tentacle | 25 | Peter & the Wolf | 9 | Virtual Vegas | 25 |
| Destination: Mars | 19 | Protostar | 19 | Wing Commander 3 (4 CDs) | 59 |
| Dinosaur Adventure | 19 | Quick & Easy Spanish | 19 | Wolf | 19 |
| Dr. T's Sing-Along for Kids | 19 | Rebel Assault | 25 | **ADULT CD TITLES** | |
| European Racers | 19 | Relate with Ease | 25 | MUST BE 18 OR OLDER! | |
| F-117A Stealth Fighter | 15 | Return of the Phantom | 25 | Adult Movie Almanac | 39 |
| F15 Strike Eagle III | 15 | Return to Zork | 15 | Adult NM 6 Pak (6 CDs) | 69 |
| Family Bible | 19 | Ring World | 19 | Adventures of Seymour Butts | 39 |
| Family Doctor | 19 | Rock, Rap & Roll | 25 | Asian Heat | 29 |
| Fonts Platnum | 9 | Shuttle | 15 | Biker Babes | 19 |
| Gardening | 19 | SimCity 2000 | 25 | Defending Your Sex Life | 29 |
| Great Literature Plus | 19 | Space Adventure | 19 | Dream Machine (HOT!) | 39 |
| Grolier's Encyclopedia 1.5 | 9 | Sports Illustrated Almanac | 19 | Erotic Adult Sampler | 9 |
| Grolier's Encyclopedia 6.0 | 19 | Star Crusader | 19 | House of Dreams | 29 |
| Gunship 2000 | 19 | Star Trek-25th Aniversary | 19 | Immortal Desire | 29 |
| Haldeman Diaries: Nixon Yrs | 19 | Subwars 2050 | 19 | Ladies' Club: Poker Night | 29 |
| Harpoon CD-ROM | 19 | Syndicate | 29 | Legend 4 | 29 |
| Hobbe's OS/2 | 19 | TFX Tactical Fighter | 25 | Legends of Porn | 29 |
| Inca II | 25 | The Lawnmower Man | 25 | Menage A Trois | 29 |
| Indiana Jones/Fate of Atlantis | 19 | Tortoise & the Hare | 35 | Model Wife | 29 |
| Iron Helix | 19 | Tuneland with Howie Mandel | 25 | Naughty Butt Nice | 29 |
| Just Grandma & Me | 15 | Twain's World | 19 | New Wave Hookers 2 | 29 |
| Kid's Read: Aesop's Fables | 15 | U.S. Air Force: Clips | 9 | Night Watch Interactive II | 39 |
| Kid's Read: Benjamin Bunny | 9 | U.S. Amphibious Assault: Clip | 9 | Passion | 19 |
| Kid's Read: Cinderella | 15 | U.S. Atlas MPC | 19 | Sex | 29 |
| Kid's Read: Heather Hits | 15 | U.S. Marines: Clips | 9 | Seymour Butts in Paradise | 29 |
| Kid's Read: Mud Puddle | 15 | U.S. Military Helicopter: Clips | 9 | Space Sirens | 39 |
| Kid's Read: Paper Bag Princess | 15 | U.S. Navy Aircraft: Clips | 9 | Sweet Body | 19 |
| Kid's Read: Peter Rabbit | 15 | U.S. Navy Ships: Clips | 9 | Traci Lords: I Love You | 29 |
| Kid's Read: Scary Poems | 9 | Ultimate Domain | 19 | Urotsujidiji (HOT!) | 29 |
| King's Quest VI | 19 | USA Today | 15 | Virgins | 29 |
| Kodak Photo CD Access | 15 | Webster's Kids Dictionary | 19 | Virtual Vixens (HOT!) | 39 |
| Legend of Kyrandia | 25 | Win Platnum | 9 | Wander Lust Interactive | 39 |

*NOTE: SOME TITLES ARE OEM AND VALID ONLY WITH HARDWARE PURCHASE*

# MULTIMEDIA KITS

## STARTER 2X

2X DOUBLE SPEED
MPC Multimedia PC
DOUBLE SPEED CD-ROM
16-BIT SB-COMPATIBLE SOUND CARD
PAIR OF STEREO SPEAKERS (15 WATTS)
23 TITLE SUPER BUNDLE (SEE SIDE BAR)
**$199.97**

## EXPLORER 2X

2X DOUBLE SPEED
Sound BLASTER
DOUBLE SPEED CD-ROM
SOUND BLASTER 16 MULTI-CD SOUND
PAIR OF STEREO SPEAKERS (15 WATTS)
23 TITLE SUPER BUNDLE (SEE SIDE BAR)
**$229.97**

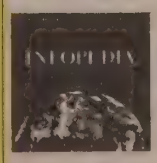
## ADVENTURER 4X

4X QUAD SPEED
Sound BLASTER
MPC Multimedia PC
TEAC QUAD SPEED CD-ROM
*195MS ACCESS TIME · 600KB/S TRANSFER*
SOUND BLASTER 16 MULTI-CD SOUND
PAIR OF STEREO SPEAKERS (15 WATTS)
23 TITLE SUPER BUNDLE (SEE SIDE BAR)
**$299.97**
*UPGRADE TO SOUND BLASTER AWE 32 - ADD $170*

## EMPEROR 4X-SCSI

4X QUAD SPEED
Sound BLASTER
MPC Multimedia PC
TOSHIBA 3501B QUAD SPEED SCSI CD
*155MS ACCESS TIME · 600KB/S TRANSFER*
SOUND BLASTER 16 SCSI-2 SOUND
PAIR OF STEREO SPEAKERS (15 WATTS)
23 TITLE SUPER BUNDLE (SEE SIDE BAR)
**$429.97**
*UPGRADE TO SOUND BLASTER AWE 32 - ADD $240*

# ENVISION SUPER 23 TITLE BUNDLE




## Infopedia '95

29 Volume Encyclopedia

Merriam-Webster's Dictionary
Roget's 21st Century Thesaurus
Merriam-Webster's Dictionary of English Usage
Merriam-Webster's Dictionary of Quotations
World Almanac & Book of Facts
Webster's New Biographical Dictionary
Hammond's World Atlas
Just the Fax
Grammar Examiner
Body Transparent
Millionaire II
The Fiction Advisor
Jigsaw! The Ultimate Electronic Puzzle
Algebra I First Semester
Algebra II Second Semester
The Bernstein Bears Learn About Counting
The Bernstain Bears Junior Jigsaw
Math Maze
States & Traits
Revolution 76
Designasaurus

**ENVISION**
MULTIMEDIA COMPUTER CENTERS
711G Fair Oaks Av. · South Pasadena

**CALL 818-403-9388**

**COMPUTERS**
**Next 2 Pages**

# ENVISION® MULTIMEDIA COMPUTER CENTERS LA's #1

# AFFORDABLE PENTIUM POWER

## Pentium POWERSTATIONS

Stuck in the computer slow lane? Then try Envision's Pentium Powerstations on for size! Envision has value priced Pentiums to fit your budget starting from under $1,600. With performance up to 250% faster than a 486DX2-66, they fly. At these prices, they'll leave our showrooms even faster! Come in to an Envision Multimedia Computer Center and try one on for size today.

### Introducing 75MHz Pentiums!

Envision is proud to introduce the newest member to Envision's Pentium lineup. Meet the new Pentium 75MHz. Unlike the first generation Pentium 60 & 66s, the Pentium 75 incorporates second generation P54C technology like low power 3.3 volt design. So now you can get 25% more power for the same price as a Pentium 60.

### Lower Prices on Pentium 100s

Envision does it again. We've lowered the prices by $150 on all Pentium 100 Powerstations putting Intel's flagship chip within your reach.

### Now All 3.3 Volt Design!

Now all Envision Pentium Powerstations incorporate new 3.3 Volt technology for lower power consumption and cooler operation so that your computer can run more optimally and efficiently.

### Enhanced IDE Hard Disks

Enhanced IDE is also standard on all Pentium Powerstations giving you super fast access to your data at lightning-fast 13.3 MB/s tranfer rates for up to 3x faster than IDE drives. Isn't that what you want from your top-of-the-line Pentium system?

### ATI 64-bit Accelerators

ATI's mach64 PCI graphics accelerators, winner of PC Magazine's Editor's Choice, are now standard on all Pentium Powerstationsgiving you graphics performance three times faster than average 32-bit graphics accelerators and even faster than any other 64-bit accelerator on the market today, so that you can see what you want to see faster!

### Standard System Features

Intel Pentium-75, 90 or 100 MHz CPUs
4 PCI Local Bus Slots & 4 16-bit ISA Slots
Energy Star Green PC Power Saver
256K External Write-back Cache (ex to 512K)
3.5" 1.44MB Floppy Drive
32-bit Enhanced IDE HD Controller
Up to 13.3MB/s Transfer Rates (2-3x faster)
2 Hi-Speed 16550 Serial Ports
· ECP/EPP Enhanced Parallel Port
· Medium Tower Case/230W UL PS
· Enhanced 101-key Keyboard & Serial Mouse

### Multimedia System Features

Double or Quad Speed CD-ROMs
· 16-bit Sound Card or Sound Blaster 16
· Pair of Speakers (Magnetically Shielded)
· 23 CD Titles included ($700 Value)

See ***MULTIMEDIA KITS*** on first page for full description

FINANCE as low as $50* per month

| Maximus 75 | $1,599 |
|---|---|
| Maximus 90 | 1,849 |
| Maximus 100 | 2,099 |

Standard System Features plus:
· 8MB RAM on-board, exp to 128MB
540MB Enhanced IDE HD (850MB-Add $100)
11ms Access Time & 11MB/s Transfer Rate
· 64-bit PCI ATI mach64 Accelerator
Award Winning 64-bit Super Fast Accelerator
· 15" Flat SVGA Non-Interlaced Monitor (0.28)
Flat Screen & Low Radiation

| MULTIMEDIA SYSTEMS | | PENTIUM 75MHz | PENTIUM 90MHz | PENTIUM 100MHz |
|---|---|---|---|---|
| 2X | STARTER 2X DOUBLE SPEED CD-ROM 16-BIT JAZZ SOUND CARD | 1799 | 2049 | 2299 |
| 2X | EXPLORER 2X DOUBLE SPEED CD-ROM SOUND BLASTER 16 | 1829 | 2079 | 2329 |
| 4X | ADVENTURER 4X TEAC 4X CD-ROM (195ms) SOUND BLASTER 16 | 1899 | 2149 | 2399 |
| 4X | EXPLORER 4X-SCSI TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2 | 2029 | 2279 | 2529 |

| Colossus 75 | $2,499 |
|---|---|
| Colossus 90 | 2,749 |
| Colossus 100 | 2,999 |

Standard System Features plus:
· 16MB RAM on-board, exp to 128MB
· 1.08GB Enhanced IDE Hard Disk
10ms Access Time & 11MB/s Transfer Rate
· 64-bit PCI ATI mach64 Accelerator/2M
Award Winning 64-bit Super Fast Accelerator
· Mag DX17F 17" Flat SVGA NI Monitor (0.26)
Award Winning 17" Flat Screen Monitor

| MULTIMEDIA SYSTEMS | | PENTIUM 75MHz | PENTIUM 90MHz | PENTIUM 100MHz |
|---|---|---|---|---|
| 2X | STARTER 2X DOUBLE SPEED CD-ROM 16-BIT JAZZ SOUND CARD | 2699 | 2949 | 3199 |
| 2X | EXPLORER 2X DOUBLE SPEED CD-ROM SOUND BLASTER 16 | 2729 | 2979 | 3229 |
| 4X | ADVENTURER 4X TEAC 4X CD-ROM (195ms) SOUND BLASTER 16 | 2799 | 3049 | 3299 |
| 4X | EXPLORER 4X-SCSI TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2 | 2929 | 3179 | 3429 |

| Supremus 75 | $2,999 |
|---|---|
| Supremus 90 | 3,249 |
| Supremus 100 | 3,499 |

Standard System Features plus:
· 16MB RAM on-board, exp to 128MB
· 1.08GB Wide SCSI-3 HD
· Adaptec 2940W Wide SCSI-3 Controller
· 64-bit PCI ATI mach64 Accelerator/2M
Award Winning 64-bit Super Fast Accelerator
· Mag DX17F 17" Flat SVGA NI Monitor (0.26)
Award Winning 17" Flat Screen Monitor

| MULTIMEDIA SYSTEMS | | PENTIUM 75MHz | PENTIUM 90MHz | PENTIUM 100MHz |
|---|---|---|---|---|
| 2X | STARTER 2X DOUBLE SPEED CD-ROM 16-BIT JAZZ SOUND CARD | 3199 | 3449 | 3699 |
| 2X | EXPLORER 2X DOUBLE SPEED CD-ROM SOUND BLASTER 16 | 3229 | 3479 | 3729 |
| 4X | ADVENTURER 4X TEAC 4X CD-ROM (195ms) SOUND BLASTER 16 | 3299 | 3549 | 3799 |
| 4X | EXPLORER 4X-SCSI TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2 | 3429 | 3679 | 3929 |

It answers the phone! It faxes! It plays music & data CDs! It's even a TV*?!?

# Introducing Family·STATION

*FamilySTATION... it's a whole new type of computer. That's because it's not just a computer, it's also a fax machine, modem, answering machine, CD stereo system, cable-ready TV, video game player & multimedia computer all in one complete unit. It also includes loads of useful software for the whole family. With **Microsoft Works** which includes a spreadsheet, word processor & database, Dad can bring home work from the office. Mom can manage the family finances with **Microsoft Money**. Son can research the world with the 21 Volume **Compton's Encyclopedia**. Daughter can find the latest news for her report with **America Online**. Imagine doing so much from one place! It's FamilySTATION... built with your family in mind.*

### Intel Inside

Envision FamilySTATIONs are powered by genuine Intel 486 & Pentium technology for maximum performance, reliability and 100% guaranteed compatibility.

### It's a CD Stereo System

You can select you favorite music CD to keep you relaxed while you type away. And with a built-in mixer, you can adjust the volume or balance.

### It's a Video Game Player

Play your favorite video game like Rebel Assault or SimCity 2000. You'll get blown away by the realistic sounding sound effects from the built-in 16-bit sound card. And you can plug in your favorite joystick.

### It's an Answering Machine

The FamilySTATION can answer your phone with the built-in voice mail system. It can direct messages to up to 999 mailboxes or page you when you get a message.

### It's a Fax Machine & Modem

Receive or send faxes anywhere in the world with the built-in fax. Or call your favorite online service to see the latest news, shop at thousands of stores, or check your bank account balance with the built-in modem. You can even hook into Internet, that "information superhighway" you've been hearing so much about.

### It's a Cable-Ready TV*

You can add optional TV capability to your FamilySTATION so that you can watch the latest news or your favorite programs without leaving your PC.

### It's a Multimedia Computer

At the heart of every FamilySTATION is a full multimedia compter system ready to access the more than 5000 multimedia CD-ROM titles now on the market from 21 volume full encyclopedias to interactive stories that read to kids to educational programs that can teach you kids subjects like history or calculus or access great works of literature to exciting games that let you conquer the world or build your own special world.

### It's Loaded with Software

It comes with lots of software like Microsoft DOS, Microsoft Windows, Microsoft Works, Microsoft Money, Compton's Encyclopedia, America Online, and over 20 more exciting titles including exciting action-packed games.

**Optional TV capability is $179 extra.*

### SPECIFICATIONS

· Intel 486 or Pentium CPUs
· 4MB Memory, ex to 64MB (8MB-Add $160)
· 3.5" 1.44MB Floppy Drive
· 425MB Hard Drive, upgradable to 1,080MB
· 14" Super VGA Non-Interlaced Monitor (0.28)
· Enhanced 101-key Keyboard & Mouse
· Double Speed CD-ROM Drive
· 16-bit Stereo Sound Card & Speakers
· 14,400bps Fax & Modem
· Voice Mail Phone Messaging System
· Optional TV Tuner available
LOADS OF SOFTWARE INCLUDED
· Microsoft DOS 6.22
Microsoft Windows 3.11
· Microsoft Works 3.0
· Microsoft Money 3.0 (family finance manager)
· 29 Volume Infopedia 1995 Encyclopedia
· America Online & over 20 more exciting titles!

*4 Models to Choose From*

| 486SLC2-66 | $1,299 |
|---|---|
| 486DX2-66 | $1,399 |
| Pentium 75 | $1,749 |
| Pentium 90 | $1,999 |

***OR FINANCE FROM $51/MO***

ENVISION® MULTIMEDIA COMPUTER CENTERS **Parts & Multimedia - Back 1 Page**

# COMPUTER SOURCE

**PAY NO INTEREST TIL JUNE 1995**

## 486 VLB STATIONS

**$898** 486DX2-66 | **$948** 486DX2-80 | **$1048** 486DX4-100

- 486DX2-66, DX2-80 or DX4-100 CPU
- Pentium Overdrive Upgradable (P24T)
- 256K External Write-Back Cache
- 4 MB 72 Pin RAM, exp to 64 MB
- 3.5" 1.44M Floppy Drive
- 540 MB Enhanced IDE Hard Disk (Add $100-850MB)
- 32-bit VLB Enhanced IDE-I/O HD/FD Controller
- 32-bit Super VGA Graphics Accelerator/1M
- 14" 1024x768 SVGA NI Monitor (0.28dp) NON-INTERLACED/GREEN PC/LOW RADIATION
- 2 Serial/Parallel/Game Ports
- Mini Tower Case, 101-key Keyboard & Mouse

FINANCE as low as $33* per month

### WITH MULTIMEDIA

| MULTIMEDIA SYSTEMS | | 486DX2 66MHz | 486DX2 80MHz | 486DX4 100MHz |
|---|---|---|---|---|
| 2X | STARTER 2X — DOUBLE SPEED CD-ROM 16-BIT JAZZ SOUND CARD | 1098 | 1148 | 1248 |
| 2X | EXPLORER 2X — DOUBLE SPEED CD-ROM SOUND BLASTER 16 | 1128 | 1178 | 1278 |
| 4X | ADVENTURER 4X — TEAC 4X CD-ROM (195ms) SOUND BLASTER 16 | 1228 | 1278 | 1378 |
| 4X | EXPLORER 4X-SCSI — TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2 | 1328 | 1378 | 1478 |

SEE MULTIMEDIA KITS ON FIRST PAGE FOR FULL DESRIPTION

## 486 PCI/VLB STATIONS

**$998** 486DX2-66 | **$1048** 486DX2-80 | **$1148** 486DX4-100

- 486DX2-66, DX2-80 or DX4-100 CPU
- Dual PCI & VLB Local Bus Architecture
- 256K External Write-Back Cache
- 4 MB 72 Pin RAM, exp to 64 MB
- 3.5" 1.44M Floppy Drive
- 540 MB Enhanced IDE Hard Disk (Add $100-850MB)
- 32-bit Enhanced IDE-I/O HD/FD Controller
- 32-bit PCI Super VGA Graphics Accelerator/1M
- 14" 1024x768 SVGA NI Monitor (0.28dp) NON-INTERLACED/GREEN PC/LOW RADIATION
- 2 Serial/Parallel/Game Ports
- Mini Tower Case, 101-key Keyboard & Mouse

FINANCE as low as $36* per month

### WITH MULTIMEDIA

| MULTIMEDIA SYSTEMS | | 486DX2 66MHz | 486DX2 80MHz | 486DX4 100MHz |
|---|---|---|---|---|
| 2X | STARTER 2X — DOUBLE SPEED CD-ROM 16-BIT JAZZ SOUND CARD | 1148 | 1198 | 1298 |
| 2X | EXPLORER 2X — DOUBLE SPEED CD-ROM SOUND BLASTER 16 | 1178 | 1228 | 1328 |
| 4X | ADVENTURER 4X — TEAC 4X CD-ROM (195ms) SOUND BLASTER 16 | 1278 | 1328 | 1428 |
| 4X | EXPLORER 4X-SCSI — TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2 | 1378 | 1428 | 1528 |

SEE MULTIMEDIA KITS ON FIRST PAGE FOR FULL DESRIPTION

## PENTIUM PCI STATION

**$1298** PENTIUM 75 | **$1548** PENTIUM 90 | **$1798** PENTIUM 100

- Pentium 75, 90 or 100 MHz CPU
- 256K External Write-Back Cache
- 4 MB 72 Pin RAM, exp to 128 MB
- 3.5" 1.44M Floppy Drive
- 540 MB Enhanced IDE Hard Disk (Add $100-850MB)
- 32-bit Enhanced IDE-I/O HD/FD Controller
- 32-bit PCI Super VGA Graphics Accelerator/1M
- 14" 1024x768 SVGA NI Monitor (0.28dp) NON-INTERLACED/GREEN PC/LOW RADIATION
- 2 Serial/Parallel/Game Ports
- Medium Tower Case, 101-key Keyboard & Mouse

FINANCE as low as $45* per month

### WITH MULTIMEDIA

| MULTIMEDIA SYSTEMS | | PENTIUM 75MHz | PENTIUM 90MHz | PENTIUM 100MHz |
|---|---|---|---|---|
| 2X | STARTER 2X — DOUBLE SPEED CD-ROM 16-BIT JAZZ SOUND CARD | 1498 | 1748 | 1998 |
| 2X | EXPLORER 2X — DOUBLE SPEED CD-ROM SOUND BLASTER 16 | 1528 | 1778 | 2028 |
| 4X | ADVENTURER 4X — TEAC 4X CD-ROM (195ms) SOUND BLASTER 16 | 1598 | 1848 | 2098 |
| 4X | EXPLORER 4X-SCSI — TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2 | 1728 | 1978 | 2228 |

SEE MULTIMEDIA KITS ON FIRST PAGE FOR FULL DESRIPTION

## PERFORMANCE, SERVICE & OPTIONS!

### MORE PERFORMANCE

*Envision doesn't only have the lowest price on computers in town, it also has the **highest performance computers** in town utilizing the latest and best in **new computer technologies**.*

#### MORE CPU CHOICES

*Envision now has the largest selection of CPU types to choose from. This month we've added new 3.45V 486DX2-8 &, 486DX4-100 systems into our lineup as well as new Pentium 75MHz systems giving you 104 different configurations to choose from. And as always, if you don't find what you're looking form you can customize your own configurations to suit your needs.*

#### 4X - QUAD SPEED CD-ROM

*Quad-speed CD-ROM drives are now available in the entire lineup of Envision systems giving you a whole new dimension in multimedia performance. With 600KB/s Transfer Rates, they run twice as fast as regular double speed CD-ROM drives and 50% faster than triple speed CD-ROM drives for xtra performance.*

#### FAST 64-BIT GRAPHICS

*Many Envision Systems now feature **super fast 64-bit Graphics Accelerators**, which process video data **64 bits** at a time, for video performance that is more **than twice as fast** as normal 32-bit accelerators making them perfect for handling and processing complex graphics like CAD, desktop publishing graphics design and animation, and vector/raster graphics*

### MORE SERVICE

*Envision also has some of the best service and support. At Envision, we feel that it the most important factor in choosing a computer is not the price or performance, but the place you buy it from. That's why our staff is dedicated to giving you the best service and support possible.*

#### 2 YEAR LABOR/1 YEAR PARTS WARRANTY

*All Envision Systems are backed with Envision's **exclusive 2 years labor and 1 year parts warranty** for piece of mind.*

#### GE Service Protection Plus Extended 4 Year Service Plans

*And for added piece of mind, you can add a **4 year on-site extended service plan** from General Electric - the nation's leader in high technology service and suport.*

#### 96 HOUR BURN-IN TESTING

*All Envision Systems are run through Envision's comprehensive **96-hour burn-in** testing to ensure system integrity & reliability.*

#### ASSEMBLED IN THE USA

*Envision Systems are assembled right here in the **United States** at our Southern California computer factory using only the finest components made by such big manufacturers as **Intel, IBM, Conner, Teac, Sony, ATI, Diamond** and **Creative Labs**.*

#### CUSTOM CONFIGURATIONS

*Envision has many different models to choose from but if you don't see the configuration that best suits your need, we would be happy to custom configure your system the way you want. Just ask your friendly Envision sales representative for more details on the many options that you can add.*

### FINANCING

*Envision offers you many differents ways for you to buy an Envision computer. You can pay by cash, check, VISA, MasterCard, American Express or Discover. Envision also has many different financing plans to fit your budget.*

#### 90 DAYS SAME AS CASH

*You can select our 90 days same as cash plan which gives you up to **90 days** to pay for your computer **without paying any interest**!*

#### MONTHLY PAYMENT PLANS

*You can also select our closed-end **financing plans** with terms of **up to 60 months** with reasonable monthly payments that won't break the bank.*

#### A FRIENDLY & KNOWLEDGABLE STAFF

#### 8+ YEARS IN THE INDUSTRY

The Fine Print: Prices are based on C.O.D. Cash and reflect cash discount. Prices are good with this ad only. *Financing figures are estimated and are based on 36 months. Final financing figures may be different and financing is on approved credit. Prices, configurations and availability are subject to change without notice. All sales are final. Warranties are carry-in only and do not include on-site service. Not responsible for typo errors.

## 486 VALUESTATIONS

### 486DX2/4 VALUESTATIONS

#### Standard System Features

- 486DX2-66, DX2-80 or DX4-100 MHz CPU
- 8MB RAM on-board, exp to 64MB
- Energy Star Green PC Power Saver
- 256K L2 External Write-back Cache
- 3.5" 1.44MB Floppy Drive
- 540MB Enhanced IDE HD (850MB-$100)
- 11ms Access Time & 11MB/s Transfer Rate
- 32-bit Enhanced IDE HD Controller
- Up to 11MB/s Transfer Rates (2-3x faster)
- 15" Flat SVGA Non-Interlaced Monitor (0.28)
- Diamond Stealth 64 Graphics Accelerator/1M
- Medium Tower Case/230W UL PS
- Enhanced 101-key Keyboard & Serial Mouse

#### Multimedia System Features

- Double or Quad Speed CD-ROMs
- 16-bit Sound Card or Sound Blaster 16
- Pair of Speakers (Magnetically Shielded)
- 23 CD Titles included (*Over $700 Value!*)

See ***MULTIMEDIA KITS*** on first page for full description

FINANCE as low as $43* per month

ENHANCED IDE

### Ultima VLB

| | |
|---|---|
| 486DX2-66 | $1,249 |
| 486DX2-80 | $1,299 |
| 486DX4-100 | $1,399 |

| MULTIMEDIA SYSTEMS | | 486DX2 66MHz | 486DX2 80MHz | 486DX4 100MHz |
|---|---|---|---|---|
| 2X | STARTER 2X — DOUBLE SPEED CD-ROM | 1449 | 1499 | 1599 |
| 2X | EXPLORER 2X | 1479 | 1529 | 1629 |
| 4X | ADVENTURER 4X — TEAC 4X CD-ROM (195ms) SOUND BLASTER 16 | 1579 | 1629 | 1729 |
| 4X | EXPLORER 4X-SCSI — TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2 | 1729 | 1779 | 1879 |

### Performa PCI/VLB

| | |
|---|---|
| 486DX2-66 | $1,299 |
| 486DX2-80 | $1,349 |
| 486DX4-100 | $1,449 |

| MULTIMEDIA SYSTEMS | | 486DX2 66MHz | 486DX2 80MHz | 486DX4 100MHz |
|---|---|---|---|---|
| 2X | STARTER 2X — DOUBLE SPEED CD-ROM | 1498 | 1548 | 1648 |
| 2X | EXPLORER 2X | 1528 | 1578 | 1678 |
| 4X | ADVENTURER 4X | 1628 | 1678 | 1778 |
| 4X | EXPLORER 4X-SCSI | 1728 | 1778 | 1878 |

## ENVISION®

MULTIMEDIA COMPUTER CENTERS

**818.403.9388**

Fax: 818.403.9380 Tech Support: 818.403.9389

*711G Fair Oaks Ave. · South Pasadena, CA 91030*

*Hours: Mon-Sat 10:30A-7:00P*

AMIGA *continued...*

models being used had thread adhered to their surfaces, forming a grid net. The pointer was then placed at intersecting lines on the grid. To draw an analogy from image digitizing, it reminded me of using the old three-pass DigiView setup, compared to today's video framegrabbers.

If you've been looking for a multiscan monitor for your Amiga, look no further than CD Solutions' CD-1401. This 14" .28mm dot pitch monitor scans from 15kHz to 36kHz and can handle all of the normal Amiga modes, including Super72 and Productivity. (It does not have speakers or composite input, however.) The display is bright and crisp—it appeared to be a quality product. The company is currently working on a 20" version. It was very nice to see a company so excited about bringing its products to the Amiga market.

Questar Productions was showing off its new terrain-modeling product, World Construction Set. The main advantage of this package over existing packages, like VistaPro and Scenery Animator, is that it is not limited to a small geographic area. You can animate landscape "flybys" over the United States, or even the entire planet, with reasonable memory requirements. The terrain can also include things like streams, roads, grass, etc. The demo animation being run was very cool.

If you are looking for a great TBC with a few extra features, be sure to check out Feral's Feral Effect. This is a TBC/Synchronizer and digital video effects device. It will work in concert with the Video Toaster and solve one of its biggest limitations: smooth image resizing. It's great for over-the-shoulder picture-in-picture shots.

PreVue Technologies was there with its array of Amiga-video accessories, including the indispensable Sync Strainer. This device is the only way to get multiscan monitors to cooperate with a genlocked Amiga/Toaster system.

If you are in need of a graphics and audio file catalog program, FOCUS GbR's graphicRECALL may fit the bill. It is basically a specialized front end for Elastic Reality's ADPro and makes a browsable catalog of miniature versions of your images. The actual file can be viewed/played by simply double-clicking on the miniature.

The L.A. Video Toaster Users Group had a booth and also a mini theater, where they were showing some of their members' fine video work.

There were many other exhibitors, including several retailers, and I wish I had the room to talk about them all. Suffice it to say there is still a lot of development and excitement for the Amiga/VideoToaster. Additionally, NewTek is very committed to continued support for the existing installed base. For a machine that is (temporarily) no longer in production, there is tremendous momentum here. This is good news for whomever picks up the Amiga technology, but they better hurry! ■

*Copyright © 1995 by Douglas J. Nakakihara. All rights reserved.*

**Donetta Colboch and LightWave programmer Alan Hastings**

MARCH MADNESS !!
We Will BEAT any Advertised Price!

486 DX2 80 MHz
4MB RAM 420MB HD
• 32Bit SVGA Video Card (with Accelerator)
• 32Bit IDE/IO HD FD Controller
• 256K Cache w/ZIF Socket
• 14" SVGA .28 NI 1024X768 Color Monitor
• 1.2 or 1.44 FDD
• Mini Tower Case
• 2S, 1P, 1G, 101 Enhanced Keyboard
• Mouse & Pad Included
LIMITED QUANTITIES
$899

IBM DAUPHIN
486 SUBNOTEBOOK
• 6MB RAM
• Internal Fax Modem
• AC ADapter Battery Charger
• Additional RAM Available
• Built By IBM
$649

HP PRODUCTS
DESKJET 540.....$295
500C/560C.....$379/489
HP 4P/4MP.....$939/1289
• HP 4+/4L.....$1369/629
• HP LASERJET 4M ....$1749
• HP LASERJET 4ML ....$969
• HP DESKJET 1200C.....Best Price

486-33MHz
• 4MB RAM 255MB HD
• 1.2 or 1.44 FDD
• SVGA Video Card
• AT I/O & IDE (2S, 1P, 1G)
• 101 Enhanced Keyboard
• Mini Tower Case & P.S.
• SVGA 14" Monitor 1024x768, .28 NI
$699!

TOSHIBA NOTEBOOKS
T-4400 2/120 $[illegible]
T-1900 4/120 $1149
T-1910 4/200 $1179
T-1900c 4/200 $1425
T-1950 4/200 $1495
T-1910cs 4/120 $1499
T-1960cs 4/200 $2049
T-1950ct 4/200 $995 Active Color
T-2400/T-4900 CALL
T-4700/T-4800 CALL
T-4600c/T3400 CALL
CALL FOR SUPER SPECIALS ON ALL NOTEBOOK MODELS
SPECIAL PRICE ON MEMORY UPGRADES FOR ALL SYSTEMS & ACCESSORIES

Apple
Mac 605 4/160 w/Software Bundle ....$799

Apple Macintosh Blowout
BLACKBIRD SPECIAL
520
5200
540
540c
IN STOCK NOW CALL!!
POWER PC
6100 8/250.....$1249
6100 8/250/CD .....$1449
7100 8/500.....$1999
7100 AV 8/500/CD.....$2649
8100 8/500 .....$2525
8100AV 16/500/CD.....$3349
Mac 630 4/250 ..... Call
Apple Laser Select 310 ..... $539
Mac 605 4/160 w/Color Monitor & Keyboard w/Software .... $1249
Mac 610 8/160 ..... $1395
Mac 650 8/230. ..... In Stock
Mac Color Monitor 14" ..... $289
Mac 240AV 8/230/CD ..... Call
Powerbook 170 ..... Call
PowerBook 145B 4/80 ..... $1209
PowerBook 150 4/120 ... $1349
PowerBook 180C 4/120/ Modem ..... In Stock
CALL FOR OTHER MODELS
MEMORY UPGRADES & FAX AVAILABLE

INTEL PENTIUM-90MHz PCI
• Pentium 90MHz CPU/CPU Fan
• 8MB RAM
• 540MB HD
• 1.2 or 1.44 FDD
• PCI IDE Controller (2S, 1P, 1G)
• PCI SVGA Accelerator 1 MB Card
• 14" High Res SVGA .28 NI Monitor
• 101 Keyboard & Mouse
$1699 THAT'S RIGHT!

University, Government & Corporate P.O.'s Welcome

BMI COMPUTER INC.
611 N. La Cienga Blvd., Los Angeles, CA 90069
1/4 Block North of Melrose
(310) 659-8202 (213) 655-9666
Since 1985
Fax (310) 659-3803 • FREE PARKING IN REAR
Prices subject to change without notice and reflect a cash discount

COMPUTER REPAIR
LOWEST PRICES!
FAST, EXPERT TROUBLE-SHOOTING BY OUR VERY EXPERIENCED ENGINEER.
-UPGRADES-
-DATA RECOVERY-
WE REPAIR ALL MAKES AT THE LOWEST PRICE!
(Including Macintosh, IBM Compatibles, ALL Laser Printers)
WE WILL SOLVE THE PROBLEM.
SYSTEMS & MONITORS REPAIRED
LASER PRINTER REPAIR!
213 655-9666
310 659-8202
MON-SAT

# 700 CD-ROM TITLES ALL AT WHOLESALE PRICES

**CLIPART PUBLISHING**

| | |
|---|---|
| Art Appeal (business) | $15 |
| Art Appeal (education) | $15 |
| Art Appeal (governmnt) | $15 |
| Business Clipart | $11 |
| Clipart Cornecopia | $15 |
| Clipart Heaven 2 | $21 |
| Clipart Warehouse | $11 |
| Corel Gallery | $36 |
| Corel Draw 5 | $185 |
| Corel Unleahed 5 | $37 |
| Fonts Platinnum | $10 |
| Font Heaven | $15 |
| Font Elegance | $14 |
| Full Bloom | $16 |
| Gif Galore | $17 |
| Icons 4000 | $19 |
| Image Library | $12 |
| Image Warehouse | $16 |
| Kodak Photo CD | $12 |
| Megaclipart (color) | $29 |
| MS Publisher | $59 |
| Photo Gallery | $15 |
| Publish It 2.0 | $15 |
| Publisher Platinum | $12 |
| Publisher Background | $15 |
| Publisher Paradise Pro. | $15 |
| Publisher Premiere Art | $15 |

**EDUCATION**

| | |
|---|---|
| 3-D Dinosaur | $19 |
| Animals of San Diego | $12 |
| Arthur Birthday Surp. | $32 |
| Arthur Teacher Trouble | $15 |
| Carmen San Diego | $16 |
| Cat Came Back | $12 |
| Complete Algebra | $15 |
| Creative Writer | $39 |
| Creepy Crawlies | $12 |
| Dinosaur Encyclopedia | $14 |
| Dr. T's Sing Along | $15 |
| Educational Platinum | $10 |
| Fine Artist | $39 |
| Forever Growing Gard. | $15 |
| Guidebook to Math | $12 |
| Jurassic Abc's | $15 |
| Just Grandma & Me | $15 |
| Magic School Bus | $35 |
| Mario's Missing Deluxe | $15 |
| Mario's Time Machine | $15 |
| Mavis Beacon For Kids | $18 |
| Mario's Early Years | $13 |
| McMillan's Dictionary | $15 |
| Merriam Webster Dict. | $15 |
| Middle School | $15 |
| Monkey Bars | $15 |
| Ocean's Below | $15 |
| Oregon Trail | $17 |
| Ozzy World | $19 |
| Play-N-Learn | $12 |
| Power Ranger's | $14 |
| Putt Fun Pack | $13 |
| Putt Putt Moon | $19 |
| Putt Putt Parade | $16 |
| Real World Math | $15 |
| Sitting on The Farm | $12 |
| Space Adventure | $12 |
| Tortoise & Hare | $32 |
| Tuneland | $19 |
| Ugly Duckling | $14 |
| Undersea\Kid's Zoo | $19 |
| Whales | $10 |
| Word Stuff | $15 |

**GAMES**

| | |
|---|---|
| 101 Best Games 1 | $12 |
| 101 Best Games 2 | $12 |
| 7th Guest | $17 |
| Aces Critical Mission | $12 |
| Aces Over Europe | $22 |
| Aces of the Pacific | $22 |
| Aegis | $24 |
| Alien Logic | $20 |
| Alone in the Dark | $16 |
| Armada | $30 |
| Battle Chess Enhan. | $16 |
| Beneath The Steel Sky | $23 |
| Betrayl At Krondor | $18 |
| Blown Away | $21 |
| Blue Force | $14 |
| Chessmaster 4000 Tur. | $15 |
| Civilization\Mantis | $20 |
| Commanche | $26 |
| Commander Blood | $20 |
| Corridor 7 | $18 |
| Cyclemania | $29 |
| Cyclones | $20 |
| Cyberace | $15 |
| Dark Legions | $20 |
| Dark Sun 1 | $20 |
| Dark Sun 2 | $20 |
| Dawn Patrol | $20 |
| Day Of The Tentacle | $19 |
| Desert Strike | $20 |
| Doom 2 | $35 |
| Doom 2 Accesory Pack | $17 |
| Doom Explosion | $15 |
| Doom Mania 2 | $13 |
| Dracula Unleashed | $20 |
| Dragon Liar | $26 |
| Dragon Lore | $25 |
| F117A\Red Storm | $15 |
| Fleet Defender | $20 |
| Gaberial Knight | $17 |
| Goblins 3 | $20 |
| Great Naval Battles 2 | $20 |
| Gunship 2000 | $15 |
| Hell | $24 |
| Hell Cab | $22 |
| Inca 2 | $22 |
| Indiana Jones | $17 |
| Indycar | $19 |
| Iron Helix | $17 |
| Journeyman Turbo | $20 |
| Jutland | $15 |
| Kings Quest 6 | $15 |
| Kyrandia Book Three | $29 |
| Lands of Lore | $24 |
| Leisure Suit Larry 6 | $22 |
| Lode Runner Returns | $21 |
| Lord Of The Rings | $18 |
| Mad Dog 1 | $16 |
| Mad Dog 2 | $18 |
| Megadoom | $12 |
| Megarace | $15 |
| Menzoberranzan | $20 |
| MS Golf | $19 |
| Myst | $29 |
| NasCar | $25 |
| Outpost | $22 |
| Panzer General | $19 |
| Police Quest 4 | $22 |
| Protostar | $15 |
| Quantum Gate | $18 |
| Ravenloft | $20 |
| Rebel Assault | $29 |
| Return To Zork | $17 |
| Ringworld | $15 |
| Rise of the Robot | $25 |
| Secret Weapons Luft. | $13 |
| Sherlock Holmes 1 | $14 |
| Sherlock Holmes 2 | $14 |
| Sherlock Holmes 3 | $14 |
| Sim City Enhanced | $17 |
| Sim City 2000 | $20 |
| Space Simulator | $35 |
| Star Crusader | $20 |
| Star Trek 25th | $17 |
| Strike Eagle III | $17 |
| Subwar 2050 | $22 |
| Terminator Chess | $15 |
| Tornado | $19 |
| Trump Castle 3 | $12 |
| Ultimate Domain | $19 |
| Wolf 3D Mania | $12 |
| Wolf | $17 |
| World Circuit | $15 |
| X-Com | $23 |

**LANGUAGES**

| | |
|---|---|
| Berlitz French | $89 |
| Berlitz German | $89 |
| Berlitz Italian | $89 |
| Berlitz Spanish | $89 |
| Dictionary\Languages | $11 |
| Languages of World | $15 |
| Quick & Easy Spanish | $19 |
| Translator Span.-Eng. | $29 |
| Triple Play English | $19 |
| Triple Play French | $19 |
| Triple Play Spanish | $19 |

**PROGRAMMING**

| | |
|---|---|
| 4.4 BSD Lite | $17 |
| Borland Dbase 5.0 Win | $99 |
| BSDISC | $17 |
| Cica Feb. 1995 | $13 |
| Cica 3CD's Dec. 94 | $17 |
| C-User's Group Aug 94 | $22 |
| Forbidden Subjects 1 | $19 |
| Forbidden Subjects 3 | $29 |
| Free BSD 2.0 | $25 |
| Hacker Chronicles 1 | $17 |
| Hacker Chronicles 2 | $26 |
| Ham Radio | $11 |
| Ham Radio & Scanner | $12 |
| Hobbes OS\2 | $13 |
| Hobbes Ready To Run | $15 |
| Internet Access 1995 | $18 |
| Internet Info | $16 |
| Internet Tools | $17 |
| Linux 2.1 3cd's Dec. 94 | $20 |
| MPC Wizard | $10 |
| Perl & TCL\TK | $19 |
| Plug-n-Play | $25 |
| PC Technician | $18 |
| QRZ | $13 |
| Simtel 2CD's 1995 | $13 |
| Slackware w\manual | $17 |
| Source Code Oct. 94 | $17 |
| Standards Nov. 94 | $15 |
| Technotools | $11 |
| Usenet Oct. 94 | $15 |
| Visual C++ Prof. 1.5 | call |
| Visual Basic Prof. 3.0 | $195 |
| Windows NT 3.1 | call |

**REFERENCE**

| | |
|---|---|
| Adam | $38 |
| Amer. Talking Dict. | $17 |
| American History | $16 |
| B&H Cookbook | $13 |
| B&H Gardening | $15 |
| CIA Paper's | $11 |
| Complete Legal Guide | $11 |
| Compton's 95' Ency. | $25 |
| Cookbook Heaven 2 | $14 |
| Family Dr. 3rd | $15 |
| Groiler's 95 | $24 |
| Haldeman's Diary | $15 |
| Hard Days Night | $18 |
| Healing Food Ckbook | $16 |
| Home Medical Advisor | $14 |
| Home Remedies | $13 |
| Infopedia | $25 |
| Learning Windows 3.1 | $15 |
| Library Of The Fut. 2nd | $20 |
| Map-N-Go | $36 |
| Mavis Beacon Typing 3 | $19 |
| Mayo Family Health | $15 |
| Mayo Pharmacist | $20 |
| Mayo Sports & Fitness | $20 |
| Mayo Total Heart | $20 |
| Monarch Notes | $19 |
| Movie Select | $14 |
| MS Ancient Lands | $30 |
| MS Bookshelf 94' | $32 |
| MS Complete Baseball | $29 |
| MS Comp. Basketball | $39 |
| MS Cinemania 95 | $39 |
| MS Dang. Creatures | $25 |
| MS Dinosaurs | $29 |
| MS Encarta 95 | $39 |
| MS Excel 5.0 | call |
| MS Office 4.2 | call |
| MS Office 4.3 | call |
| MS Word 6.0 | call |
| MS Works 3.0 | $30 |
| Parenting | $15 |
| Reference Library | $15 |
| Resume Maker | $15 |
| Phone Disc Reverse | $144 |
| Project Guttenberg | $16 |
| Select Phone former | $55 |
| Select Phone current | $140 |
| Shakespeare | $15 |
| Street Atlas | $69 |
| Triple AAA Trip Planer | $20 |
| USA Unzipped | $18 |
| US Atlas\Automap | $15 |
| US History | $15 |
| World Atlas 5 | $15 |

**RELIGION**

| | |
|---|---|
| Bibles and Relgions | $11 |
| Bible Heaven | $15 |
| Bible Lands\ Stories | $13 |
| Bible Library 1.1a | $18 |
| Holy Bible 1994 | $17 |
| Mulimedia Family Bible | $17 |

**SOUNDS AND MUSIC**

| | |
|---|---|
| Beethoven's 5th | $16 |
| Encyclopedia Sound 1 | $11 |
| Encyclopedia Sound 2 | $11 |
| Midi Master Collection | $11 |
| Midi Music Shop Pro. | $15 |
| Mozart | $13 |
| MS Beethoven | $39 |
| MS Mozart | $39 |
| MS Musical Instrument | $21 |
| MS Schubert | $39 |
| MS Strauss | $39 |
| MS Stravinsky | $39 |
| Music Magic Songbook | $14 |
| Music Workshop | $16 |
| Sound Wav | $15 |
| Win CD Met | $12 |

**SHAREWARE**

| | |
|---|---|
| Night Owl 15 | $20 |
| Pier 6 | $20 |
| Ruby Collection | $15 |
| Shareware Extrag. 4cd | $24 |
| Shareware Overload | $17 |
| Shareware To Max 6cd | $19 |

**SPACE**

| | |
|---|---|
| Destination Mars | $16 |
| Our Solar System | $11 |
| Red Shift | $45 |
| Return To The Moon | $17 |
| Solar Heaven | $14 |
| Space Adventure | $12 |
| Space & Astronomy | $15 |

**ADULT MOVIES**

| | |
|---|---|
| Anal Queens | $20 |
| Asian Palette | $22 |
| Dirt Duo 2CD's | $20 |
| FAO 1 | $19 |
| FAO 2 | $19 |
| Jiggly Queens | $18 |
| Kelly 18 | $18 |
| Pink Journey | $15 |
| Wet Nurses | $18 |
| Wild Desire | $15 |

**ADULT GAMES**

| | |
|---|---|
| Dream Machine | $37 |
| Night Watch | $30 |
| Night Watch 2 | $30 |
| Peepshow | $36 |

## MAILORDER TODAY!!! 5 CADDY'S $16.99 5 JEWEL CASES $1.99

# Platinum Series

YOUR CHOICE $9.99

**PRESENT THIS COUPON AND RECIEVE ANY OF THESE TITLES $9.99**

**Fonts Platinum:** Is a collection of the best fonts, font utilities, and publishing programs for Windows, assembled on CD-ROM. More than 1,500 TrueType fonts, divided into categories of Normal, Script, Decorative, and Picture fonts.

**Educational Platinum:** Contains programs for everyone in your family, from young children who are learning fundamentals such as shapes, colors, and numbers to school age kids learning mathematics and chemistry.. to adults who are mastering basic life skills such as cooking and engine maintainance.

**Games Platinum:** Is a collection of the best games for Windows with an easy to use interface. You can run all games from CD-ROM before you install them. Arcade Games, Card & dice, Puzzles, Board & Strategy.

**Home & Business Platinum:** Is a collection of best productivity tools and applications assembled on CD-ROM. Contains 100's of useful programs easy divided into 6 categories. databases, business tools, business finance, home management, home finance, personal management programs.

**Multimedia Platinum:** A collection of multimedia clips, tools ,utilities for Windows. Contains more than 680 megabytes of multimedia clips tools including full color bmp images , sound files, video clips , icons and animation.

**Publisher Platinum:** Is a collection of best clipart, fonts, and publishing tools for Microsoft Windows. 5000 Clipart, 100's of Fonts, utilities.

**Utilities Platinum:** Six categories of utilities, desktop file tools, Editor tools, Viewers, Windows Manager, and other utilities.

**Win Platinum:** Contains all the Windows programs you could possibly think of. It has a variety of drivers, fonts, games, utilities, etc. Just to many megabytes to list.

# Chestnut Titles

## YOUR CHOICE $9.99

**PRESENT THIS COUPON AND RECIEVE ANY OF THESE TITLES $9.99**

| | | |
|---|---|---|
| **NEW TITLES** | Clipart Warehouse | MVP's Game Jamboree |
| Business Clipart | Multimedia Mania | Encyclopedia of Sound 1 |
| Circle of Knowledge Ency. | Our Solar System | Encyclopedia Sound 2 |
| Fate of the Starlords | Personal Finance | **CHESTNUT VIDEO CD-ROM's** |
| **SHAREWARE** | Sound Sensations | TV Commercials of the 50' 60's |
| Bibles & Religion | Technotools | Porky Pig |
| Complete Bookshop | Windoware | Charlie Chaplin |
| Computer Reference Library | **CHESTNUT NEW MEDIA** | Flashcards on Video |
| Dictionaries and Languages | Insane Impersonations | Classic Cartoons |
| Deathstar Arcade Battles | Home & Office Legal Guide | Bugs Bunny |
| Gardening | HIV/AIDS Resource Guide | Night of the Living Dead |
| HAM Radio | Midi Master Collection | Betty Boop |
| Hugo's House of Horrors | The CIA Papers | Caricaturas Classicas |
| Shareware Trio Overload | World Traveler 1 | Sports Bloopers |

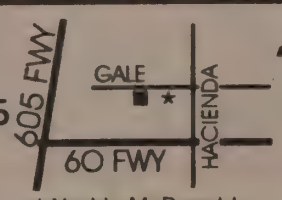
THINK & TALK **BERLITZ** SPECIAL $89.99

**GERMAN (9CD's) ITALIAN (7CD's)**

**SPANISH (8CD's) FRENCH (7CD's)**

## GET THE SAME LOW PRICES AT OUR STORE AS AT THE TRADESHOWS

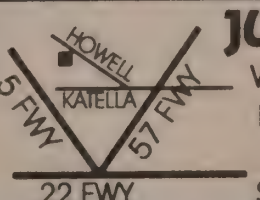
**GALE PLAZA**
15606 Gale Ave. #F
Hac. Hghts. Ca. 91745
Tel: 818-336-8922
Fax: 818-336-8922




* Next to McDonalds

**STYLIN MULTIMEDIA**
Were Open:
Mon 11-6
Tue-Fri 10-7
Sat-Sun 10-4

**N. Stadium Bus. Cntr.**
2120 Howell Ave. #404
Anaheim, Ca 92806
Tel: 714-634-38CD
Fax: 714-634-0117




**JUST CD'S**
Were Open:
Mon-Fri 9-5
Sat 10-2
Sun Closed

Each store is independently owned and operated. Product and prices may vary from store to store. All sales are final except for defective merchandise that will be exchanged for the same item within two weeks of the date of purchase.

# New Forms Of Virtual Reality

## QuickTime VR And Virtual Television Expand Your Sphere

### Virtual reality. A concept.

A demo. And now, products.

Fully immersive "Lawnmower Man" VR is only the top layer of many modes of computer-aided enhanced spatial navigation. Desktop VR, accessible to the average Macintosh and PC user, is now here in the form of Apple's QuickTime VR (QTVR) and Virtual Television (VTV) on the PC from Warp California Inc. Each, in different ways, provides a spatial freedom of inquiry, whether you "travel" using your monitor or a head-mounted display device.

QTVR and VTV are both compact and robust software-driven solutions supported by efficient compression algorithms, which are expanding the range of personal computing. In QTVR's interface, you are standing at the center of a "doughnut" of space. With VTV, you are looking through the neck of a "mushroom" of space, which can be oriented in any direction.

So far, QTVR and VTV are building blocks for developers to utilize in applications you may encounter in different software and online contexts, and are not yet available at the HyperCard level where the average user can tinker directly with them.

In the last eighteen months, digital video driven by QuickTime and Video for Windows has reshaped the desktop so that motion documents, and now full-screen sequences, have become an expected dimension in multimedia applications. In time, that window may seem "flat" if you can't poke around and wander in its virtual space.

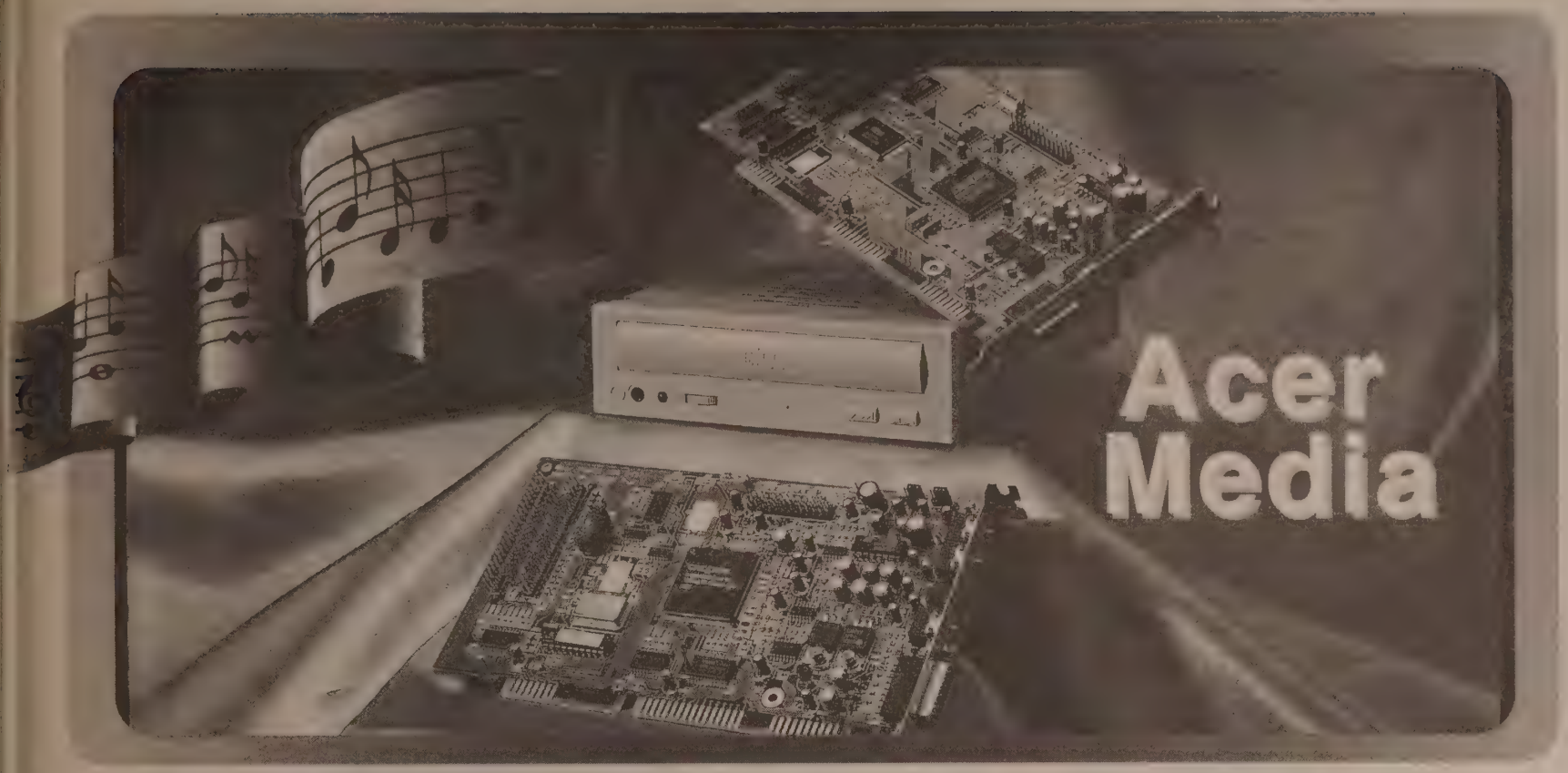
### QUICKTIME VR

A QuickTime movie is like a videotape in that it is a "strip" of data. You can stop, start, go forward and backward, and do so at different speeds. QTVR requires QuickTime 2.0.

Unlike the QuickTime movie, the panoramic form of QTVR is non-time-based spatial information. A 35mm camera on a tripod can take from eight to thirty photographs to make up a single 360-degree view. The film is then digitized, and the individual frame files are brought into the QTVR authoring system where their side edges are joined and matched. The point-of-view (POV) is user-driven, by moving the mouse, trackball, keyboard, or from within a head-mounted display (HMD). You can move the POV 360 degrees horizontally; the present

**Greetings from Infinite Loop: QuickTime VR provides a tour of the Apple campus**

BY TONY REVEAUX




# The Industry Source Means Value

## The lion is coming to you.

Now, Acer also produces multimedia kits. Just like Acer Computer Systems, the new products will offer you the best quality that money can buy. Your satisfaction is our guarantee.

The AcerCD 625 series is a double speed CD-Rom drive. With its seek time less than 300ms and data transfer rate above 300KB/sec, such high performances easily exceed the requirements of most multimedia PC standards.

And with our sound cards, AcerMagic S20 and AcerMagic S30, you will experience the true CD-quality stereo sound from your computer. They are compatible with all major sound standards and complete with double speed multi-session CD-Rom interface.

## AcerMagic S30

- 100% Sound Blaster Compatible
- Wave Table Synthesis Support
- Easy Installation
- User-friendly Music Center Software
- IDE Control
- Creative Lab Chip Set

## AcerMagic S20

- Wave Table Synthesis Support
- Easy Installation
- User-friendly Music Center Software
- MCD + IDE Control
- Opti 929 Chip Set

## AcerCD 625/625A

- Double Speed, E-IDE/TAPI Interface
- Seek Time Less Than 300 ms
- Data Transfer Rate 300 KB/sec
- Power Saving Feature

## *Special Offers*

| | |
|---|---|
| **Acer CD-ROM** | **$ 96** |
| **S20 Sound Card** | **$ 52** |
| **S30 + Acer CD-ROM** | **$156** |
| **S30 + Microsoft Encarta 95' Encyclopedia** | **$ 89** |
| **S30 + Win-Win2 CD Pack** | **$ 89** |

Prices apply to quantity of 5+ and to Dealers only.

Acer ISO 9001 AcerMagic

**Sales Rep. Needed:**
2-Year Experience Required
Salary + Commission
Please Contact Personnel Department

# IET International Electronic Technology, Inc.

*Acer Authorized Distributor*

428 Cloverleaf, Baldwin Park, CA 91706 **TEL : (818) 336-1003 FAX: (818) 330-0052**

# Free *Authorized* Novell Training

Novell Authorized Education Center

New Horizons Computer Learning Center is the ***only*** Novell Authorized Education Center (NAEC) in the Inland Empire. When you enroll in New Horizons' Novell CNE training program, you'll receive Novell's *MS-DOS for NetWare Users* and *Microcomputer Concepts for NetWare Users* course free! New Horizons is accepting enrollments now.

**When you register for New Horizons' CNE program, you get all this:**

- Free 2-user copy of NetWare. (Included in 508 course student kit.)
- Free Novell Certification Assessment Tests.
- Free CNE Test Review Course.
- Novell Authorized Courseware.
- Classes taught by Certified Novell Instructors (CNIs).
- Hands-on computer usage. One computer per student.
- Convenient hours and convenient locations.

**Call Now and Get Started in Your New Career!**
**(909) 369-9000, ext.128**
(800) 778-6682, ext. 128

New Horizons COMPUTER LEARNING CENTER

New Horizons Computer Learning Center
4371 Latham Street, Suite 101
Riverside, CA 92501-1731



FIFTH ANNUAL

Southern California Chinese Computer Association

SCCCA

ALL DAY
SATURDAY
MARCH 4

SEMINARS:
1:00PM - 4:30PM
TRADE SHOW:
1:00PM - 7:00PM
DINNER:
6:00PM - 10:30PM

FREE SEMINAR & TRADE SHOW

Featuring Speakers from
SGS THOMSON
AMD
CYRIX
INTEL
MICROSOFT

Exhibitors Include:
AMPTRON
EPSON
IBM
IET
INTEL
MAG
MAGITRON
MAX GROUP
MICROSOFT
MICROTIMES
MIT
MOTOROLA
PARADIGM
QDI
REYES
SDC
SGS THOMSON
TASK
TEXAS INSTRUMENT
TOPTEK
plus many more!

Industry Hills - Sheraton
1 Industry Hills Parkway
City of Industry

For more information call the SCCCA at 818•912•4733




## NEW FORMS OF VIRTUAL REALITY *continued...*

The ST:NG Windows and Macintosh CD-ROM provides the complete "virtual" tour of Starfleet's organization, equipment, and ship structure.

iteration of QTVR imposes a vertical maximum tilt of about 110 degrees.

There is no limit to your movement within the "doughnut" or "ring" of space in a QTVR document. You can move your POV around with the same unconscious effortlessness you'd use to turn your head and seek with your eyes. Your sense of perspective is automatically corrected in real time by QTVR's spatial-warping algorithm. Move forward and you really "zoom," or "dolly in" to the limits of the periphery. You can also embed "hot spots" within that 3-D doughnut. They can be objects, text, sounds, or any other multimedia entity. Even another QuickTime or QTVR element.

Developers using QTVR can author once on the Macintosh platform and deliver this content to run on both Macintosh and Windows-based PCs. The license fee for QTVR authoring tools is $2000 per seat. Royalties will range from $0.40 to $0.80 per unit. There are no royalties for noncommercial use.

Future directions for QTVR include the ability to create native Apple Power Macintosh run-time software, with which users can experience a dramatic, full-screen experience that totally immerses the user in the virtual environment; native Power Macintosh development tools; decreased panoramic file sizes; zoom-in viewing of interactive objects; and a "C"-level application programming interface.

## VIRTUAL STAR TREK

Simon & Schuster Interactive's *Star Trek: The Next Generation Interactive Technical Manual U.S.S. Enterprise NCC-1701-D* ($59.95) is the first release to showcase QTVR. Apple Computer collaborated with S&S to use this title as a test lab and working case study. This Windows and Macintosh CD-ROM provides the complete "virtual" tour of Starfleet's organization, equipment, and ship structure.

In the QTVR sequences, you can freely look around spaces or handle "virtual" 3-D objects like an artifact, dagger, gun, or tool. The CD also serves as a good demonstration of how QTVR may be used in applications such as games, education, training, sales, engineering, museums, kiosks, architecture, travel, and real estate. All of this combines to build a unique audiovisual environment where your curiosity is encouraged and your senses are liberated.

## "VIRTUAL TELEVISION": VTV

"Virtual Television," or VTV, allows for real-time playback of high-quality computer graphics and/or video shot with a very


*continued on page 192*

# SHAMROCK

## The Full Screen Monitor

**We Take Great Pride In Our High Quality Monitors Sold And The Excellent Service We Provide**

SRC-2002

## 21"/20" SRC-2102/2002

- AR Bonded Panel CRT with Anti-Static Treatment (Available 21" only)
- 0.28mm Dot Pitch CRT w/Invar Shadow Mask and Anti-Static Treatment
- Dynamic Focus Gun
- Wide Autoscan Capability From 30KHz to 82KHz
- Ultra High Resolution of up to 1600x1280 (Non-Interlaced)
- Two Types of 9 Pin D-Sub and 5xBNC Connectors are Provided for Optional Video Signal Connection to Prevent Image Distortion
- 20 Programmable Digital Control Memory Settings Available for Picture Sizing and Centering
- Additional Rotation Control Designed to get Exact Location of Image w/out Tilt Distortion Due to Earth Magnetic Field
- Accurate Color Control Designed to Match w/Individual Color Output Needs
- *MPR II Low Radiation*

SRC-1502

**ALL MONITORS 15" OR LARGER ARE DIGITAL WITH TILT CONTROL!!**

## SRC-1452 SUPER VGA II

- Horizontal Frequency: 30-38KHz, 47-50KHz
- Resolution: Maximum 1024x768 (Non-Interlaced) 0.28mm CRT
- Full Screen
- Universal Power Supply 110/220
- Compatible with Apple Mac II
- *MPR II Low Radiation Available*

NOW AVAILABLE

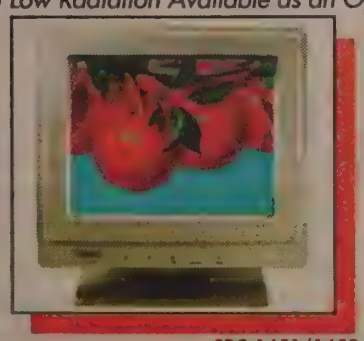
## 17" O.S.D. CONTROL AUTOSYNCHRONOUS COLOR MONITOR SRC 1703

- The 17" FST, 0.28mm dot pitch CRT with advanced technology of ASARC coating, double focus gun, and INVAR mask
- IBM and APPLE system compatibility
- Automatically adjusts for picture's centering and sizing at every popular graphic mode from 640x480 to 1280x1024. Total 23 screen presets
- Auto synchronization: Horizontal: 24-64 KHz; Vertical: 47-104 Hz
- Full screen (overscan) capability with edge to edge video display
- Rotation/Tilt control designed to position image upright without Tilt distortion due to geomagnetic field impact
- Trapeziod and pincushion correction controls added to improve the picture's geometric distortions
- R.G.B. color control adjusts displayed colors to perfectly match with printer output
- Power saving function in compliance with EPA and VESA DPMS standard
- *Low Radiation MPR II option*

**2 YEAR WARRANTY PROGRAM IS AVAILABLE... PLEASE CONTACT US!**

## SRC-1502/1502L 15" VESA MONITOR

- Horizontal Frequency 24-64KHz
- Resolution: Maximum 1280x1024 (Non-Interlaced) .28mm CRT
- Full Screen
- Universal Power Supply 110/220
- 24 Microprocessor Screen w/Factory Presetting
- Tilt Rotation Control to Position the Picture Without Tilt Distortion Effected by Earth Magnetic Field
- Pincushion Adjustment
- *MPR II Low Radiation Available as an Option*



SRC-1451/1452

## SRC-1451 SUPER VGA I

- Horizontal Frequency: 30-38KHz
- Resolution: Maximum 1024x768 (Interlaced) 0.28mm/0.39mm CRT
- Full Screen
- Universal Power Supply 110/220
- Compatible w/Apple Mac II
- *MPR II Low Radiation Available*

energy

**EPA POLLUTION PREVENTER**

SRC-1702

## SRC-1702/1702L 17" FLAT SQUARE

- Ultra High Resolution up to 1600x1280 (Non-Interlaced)
- Two Types of 9 Pin D-SUB and 5xBNC Connectors are Provided for Optional Video Signal Connection to Prevent Image Distortion
- 20 Programmable Digital Control Memory Settings Available in SRC-1702 for Image Sizing and Centering
- Accurate Color Control Designed in SRC-1702 to Make the Displayed Color Match Closely the Printer Output
- Horizontal Frequency: 24-82KHz Continuous
- 0.26mm Dot Pitch Non-Glare, F.S.T. w/Double Focus Gun, CRT Type
- *MPR II Low Radiation Available as an Option*

**FOR DEALERS ONLY: Tel. 310/946-9392 • FAX 310/946-4924**

# Lucky ♣ Prices!

**Cerritos**
17707 Valley View Blvd.
(714) 739-0444
FAX (714) 739-8291

**Van Nuys**
6265 Sepulveda Blvd # 15
(818) 781-0698
FAX (818) 781-4203

**San Juan Capistrano**
33959 Doheny Park Road # B
(714) 489-0226
FAX (714) 489-0591

**Montery Park**
600 Monterey Pass Road
(818) 300-8116
FAX (818) 300-0981

**SAN DIEGO**
9370 Waples Street
(619) 552-9355
FAX (619) 552-9016

**Hours**
Mon-Fri: 9am - 6pm
Sat 10am - 5pm
*(Cerritos CLOSED)*

*ALL ADVERTISED PRICES REFLECT A 2% CASH DISCOUNT - GOOD ONLY WITH AD!*

Ask About Micro City's Revolving Credit Plan

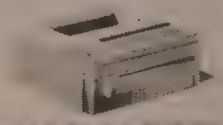
Mastercard & Visa Accepted

Stock may not be available in some stores

Prices good thru March 31st, 1995

## HP LASERJET 4L PRINTER

- 300 dpi print resolution
- HP's lowest priced LaserJet printer ever
- Small 14" by 14.5" footprint
- Equipped with 26 built-in scalable fonts for high quality documents.

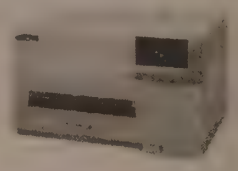


NEW LOW PRICE!

**$499.00!**

## HP COLOR LASERJET PRINTER

- Features eight full colors & millions of halftones
- Uses direct-to-drum imaging for exceptional print registration
- Fast color printing at up to 2 pages-per-minute
- Up to 10 pages-per-minute in basic black.



**$CALL!**

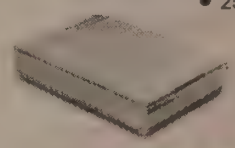
## HP SCANJET IICX COLOR SCANNER

- True 24-bit color, grayscale and text scanning
- Optical resolution of 400 dpi
- 1600 dpi using enhanced resolution technology!

**$759.00***

** AFTER $150.00 REBATE*

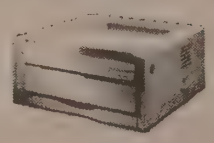
## HP SCANJET 3P SCANNER



- 256 grayscale and text scanning
- Optical resolution of 300 dpi
- 1200 dpi using enhanced resolution technology
- Comes with Calera Word-Scan OCR software

**$479.00**

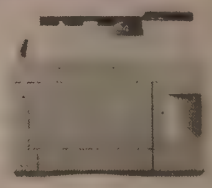
## HP LASERJET 4P PRINTER



- Features true 600 x 600 dpi printing
- Comes with 45 built-in scalable typefaces
- Enhanced HP PCL5
- 2 MB of standard memory (exp. to 26MB).

**$915.00**

## HP LASERJET 4 PLUS PRINTER



- 600 dots-per-inch output
- *New 12 page-per-minute print engine*
- 45 internal scalable typefaces
- 2MB of standard memory (expandable to 32MB).

**$1369.00!**

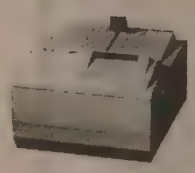
## HP DESKWRITER / DESKJET 560C INKJET PRINTER

- HP's exclusive built-in ColorSmart technology
- Features resident dual cartridges for black-and-color printing at the same time.
- Clear 600 x 300 dpi black printing
- A variety of internal and scalable fonts!

**$539.00!**

## HP LASERJET 4V PRINTER

FAST!



- Features a resolution of 600 dpi
- Prints 16 pages-per-minute; the fastest LaserJet!
- Ability to print on wide-format 11" x 17" paper

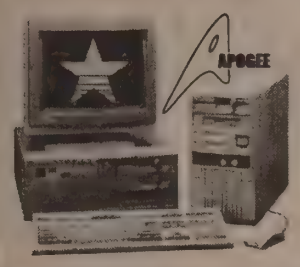
**1899.00!**

**We are also an authorized HP Plotter Dealer!**
**Call us for amazing pricing on HP's new line of DesignJet 650C inkjet plotters.**

HEWLETT PACKARD
Authorized Reseller

CA / MICRO CITY
**Smart selling since 1984!**

# Sensible ♣ Savings!



**AApogee Systems by GST/MICRO CITY**

- **Proven Performance Track Record**
- **Engineered for Maximum Upgradability**
- **Custom Configurations to suit your exact needs**

## AApogee VLB66

- Intel 486DX2/66
- 256k Cache
- 4MB RAM
- Mini-Tower Case
- 1.44MB Floppy
- ***540MB*** HD
- VL/IDE Controller
- VLB Video Card w/1MB
- 101 Keyboard

**$859.00!**

*Monitor sold separately*

## AApogee Power90

- Intel Pentium 90MHz
- 256k Cache
- 8MB RAM
- Medium-Tower Case
- 1.44MB Floppy
- ***540MB*** HD
- Diamond 64-bit SVGA PCI Video Card w/2MB
- 101 Keyboard

**$1819.00!**

*Monitor sold separately*

## AApogee SOHO33

- Intel 486DX/33 ♦ 256k Cache
- 4MB RAM
- Mini-Tower Case
- 1.44MB Floppy ♦ ***425MB*** HD
- VL/IDE Controller
- VLB Video Card w/1MB
- 101 Keyboard
- 14" SVGA Monitor NI (.28)
- Microsoft Mouse
- DOS 6.2
- Windows for Workgroups 3.11
- EPSON Stylus 800Plus Printer

**$1289.00!**

### EPSON STYLUS COLOR INKJET PRINTER

- True 720 dpi color resolution using special paper.
- Microweaving, microhalftoning and microfeeding for the best color and monochrome printing.

**$509.00**

### EPSON ACTIONLASER 1100 LASER PRINTER

- High-definition laser printing at 300 dpi resolution.
- 4 ppm print engine.
- Comes with 22 fonts!

**$205.00**

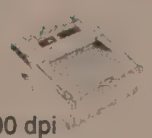
### GST 486/66 VLB MOTHERBOARD

CPU not included

- Features a 486/66 ZIFF socket
- Vesa Local Bus
- Supports 72 pin memory SIMMs

**$98.00**

### OKIDATA OL400e LED PRINTER



- 44 built-in fonts
- Great looking output at 300 dpi
- Compact size and sleek design
- Compatible with virtually all software applications!

**$399.00**

### EVERVIEW 17" SVGA MONITOR

- Supports resolutions up to 1280x1024.
- Features a dot pitch of .26; non-interlaced.

**$599.00**

### DIAMOND SPEEDSTAR PRO SVGA VIDEO CARD

For your Vesa Local Bus system, this video card supports resolutions up to 1024x768 with 16 million colors!

**$149.00**

**GST/MICRO CITY**

**Smart selling since 1984!**

*We know that you don't always have the time to call us for pricing & availability information, that's why we offer you two easier alternatives:*

**YOU CAN FAX US YOUR QUOTES AT:**

**714-739-8291**

**OR E-MAIL US ON THE INTERNET AT:**

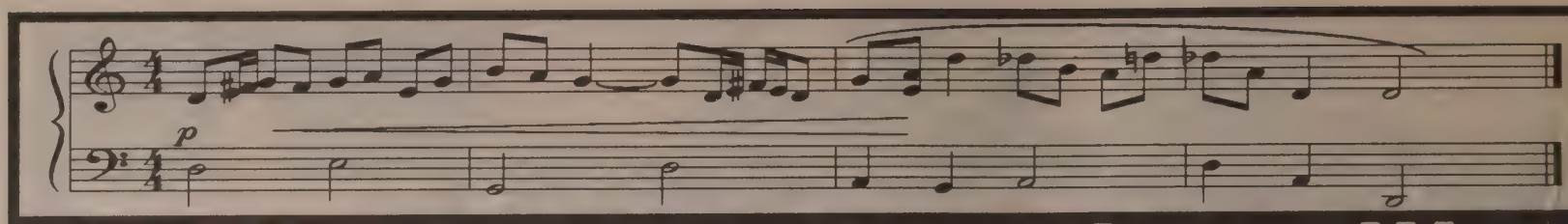
**ag915@lafn.org**

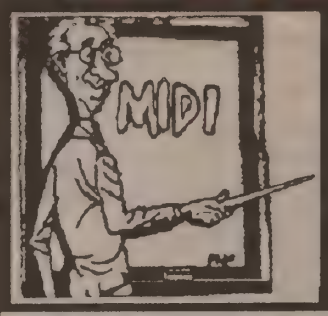
**We accept Corporate and Government Purchase Orders**

**Ask our representatives about our optional 3 Year On-site service contracts**

**Rated one of the Top *150 PC Vendors NationWide* by PC Magazine**

*The Intel Inside logo is a registered trademark of Intel Corporation Inc.*






# Make Music with Your Computer!

## NAMM

Want to see the newest products? Come by our store. Watch our NAMM show video!

**SHOW VIDEO**

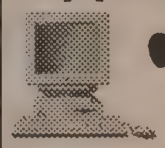
## Roland

**EP7II Digital Piano**
$999

**E36 Intelligent Synth**
$950

**JV-35 Synth w/$600 acces**
$989

## Apple® Peavey®



**Music Starter System**

Quadra 630 4/160sys
EZ Music Starter Kit:
Book of Midi
EZ Vision
Band in a Box
Interface
Peavey DPM2
260 Drum Patts
Installation
Training Included

$2299
Complete with Velocity, Multitimbal Keyboard

SAVE $1300!

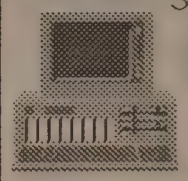
## General Music SX $2495

**Multimedia Workstation**

376 ROM Sounds
250,000 note sequencer
Battery Backed Seq Ram
Record Tempo Changes
96 Styles
32 User Styles + Varations
Lyric/Score display

## PC

Turtle Beach Systems



**Roland Monterey Midi System**

486DX-66 CPU
1meg video
1024x768 monitor
340mgHD
keyboard
mouse
Windows 3.1
Fatar st49 key
Quad
Cakewalk Win
Installation & Training

$2599

Plays 4 Tracks of Digital Audio w/4 meg rom of Sample Sounds w/ EFX!

## *The Latest Products & Largest Inventory of Music Software!*

- Voice to Midi Convtr $150
- Finale 3.0 Win upgrd $99
- Roland Snd Canvas DB
- Roland RAP-10 $299
- Over 100 Midi Help Books!
- Dr Synth & SCC1 Sale
- Cakewalk Home ST $99
- Band in a Box Pro $69
- PowerTracks Seq $29
- MusicTime $109
- Dr. T QuickScore $59
- Midi Interfaces from $25
- Noatation Prgm from $50
- Peavey DPM 3se $1695
- Midi Help Videos from $10
- General Midi Files from $12
- Turtle Beach Maui In Stock
- SAW 8 Track softwr $499
- Atari Falcon 030 $799
- Roland JV880 $599
- Passport Encore/MTPro $399
- Quad 4 track softw $sale

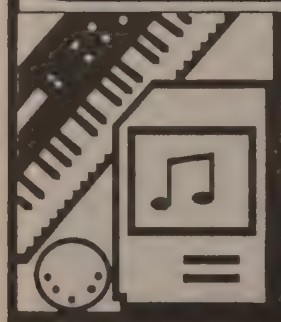
**Mac/PC Session 8 In Stock**

**Apple PowerMac 6100-66 SALE $1599**

**DAT to CD MASTER $50** Call for Details

## 9 REASONS TO PURCHASE FROM US:

1. FREE Phone Support on Products purchased from us.
2. EZ Financing & Leases
3. Over 1000 Midi Programs!
4. Private Tutoring in your home or studio by the experts
5. FREE Monday Nite Midi Introduction Seminars
6. Notation & Sequencer Classes Performer & Vision starting Soon
7. Finale User Grp meet 4th Wed
8. Midi/Music BBS (818)789-4287
9. Computer Swapmeet in Pomona Mar 4,5



# The Electronic Music Box

## 14947 Ventura Blvd. Sherman Oaks

## (818) 789-4250

SALE • UPGRADE • REPAIR • DATA RECOVERY • INSTALLATION

# We Have What You Need!

## MONTHLY SPECIAL

**486DX-33/66MHz 256K CACHE**

- 4MB Memory, 70ns
- 1.44FDD
- 3 Button Mouse
- IDE I/O 2 Serial/1 Parallel/1 Game Port
- SVGA w/1MB RAM
- SVGA 14" Monitor N.I.
- 101 Enhanced Keyboard
- Minitower w/Digital
- 420MB HDD

**VESA LOCAL BUS SYSTEM**

$849/$899

## MONTHLY SPECIAL

**IBM 486SLC2-66**

- IBM Manufactured Motherboards
- 4MB Memory, 70ns
- 1.44FDD
- 3 Button Mouse
- IDE I/O 2 Serial/1 Parallel/1 Game Port
- SVGA w/1MB RAM
- SVGA 14" Monitor N.I.
- 101 Enhanced Keyboard
- Minitower w/Digital
- 420MB HDD

**VESA LOCAL BUS SYSTEM**

$769

## MONTHLY SPECIAL

**PCI 90/60MHz**

- 4MB Memory, 70ns
- 1.44FDD
- 3 Button Mouse
- PCI IDE I/O 2 Serial/1 Parallel/1 Game Port
- PCI SVGA w/1MB RAM
- SVGA 14" Monitor N.I.
- 101 Enhanced Keyboard
- Midtower w/Digital
- 420MB HDD

$1569/$1319

## SPECIAL • SPECIAL

**486DX-80MHz**

- 4MB Memory, 70ns
- 1.44FDD
- 3 Button Mouse
- IDE I/O 2 Serial/1 Parallel/1 Game Port
- SVGA w/1MB RAM
- SVGA 14" Monitor N.I.
- 101 Enhanced Keyboard
- Minitower w/Digital
- 420MB HDD

**VESA LOCAL BUS SYSTEM**

$919

## MULTIMEDIA KIT CD 16

CD-ROM•Sound Blaster
12 CD Titles
Microphone•Speaker

**ONLY $229**

## SYSTEM UPGRADE

XT or 286 to 386DX/33MHz w/4MB.....$199

**286 or 386 to 486DX/33MHz w/1MB .....$239**

**286 or 386 to 486DX2/66MHz w/1MB .....$299**

**UPGRADE SPECIAL**

XT 286 or 386 to 486SLC/66MHz VLB w/1MB + Math Coprocessor + Cooling Fan ..... ONLY $179

**UPGRADES WHILE YOU WAIT!**

**FREE LABOR**

## BUY • SELL • TRADE-IN–NEW/USED HARD DRIVES

| REPAIR PRICE | | REPAIR PRICE | |
|---|---|---|---|
| CAPACITY | | CAPACITY | |
| 20-39MB | $35 | 200-299MB | $90 |
| 40-49MB | $50 | 300-399MB | $100 |
| 50-89MB | $65 | 400-499MB | $110 |
| 90-159MB | $75 | 500-679MB | $125 |
| 160-199MB | $80 | 700-1GB | $155 |

## BUY • SELL • TRADE-IN–NEW/USED MONITORS

**MONITOR**

WE BUY NON-WORKING VGA MONITORS

| | |
|---|---|
| Any Mono | $39 |
| Any CGA or EGA | $55 |
| Any VGA or SVGA | $65 |
| Any Multisync 12" & 14" | $85 |
| Any Terminal | $65 |
| Any 15" Monitor | $100 |
| Any 17", 19", 21" | $200 |

*CRT AND FLYBACKS EXCLUDED*

**FREE Pick-up & Delivery in O.C. if more than Five Monitors**

## MONITORS

| | |
|---|---|
| Shamrock 17",.28dpi | $519 |
| Shamrock 15",.28dpi | $289 |
| Shamrock 14",.28dpi | $205 |
| 14".39dpi SVGA N.I. | $169 |
| 14" .28dpi SVGA | $189 |

## KEYBOARDS

101 Enhanced Keyboard ....$19

## HARD DRIVES

| | |
|---|---|
| 420MB | $175 |
| 540MB | $195 |
| 850MB | $275 |
| 1GIG | $399 |

## FLOPPY DRIVES

| | |
|---|---|
| 1.2 FDD | $39 |
| 1.44 FDD | $35 |

## CPU

| | |
|---|---|
| 486DX-33MHz | CALL |
| 486DX-66MHz | CALL |

## ADD-ON CARDS

| | |
|---|---|
| 32 Bit VL-Bus IDE I/O | $25 |
| 32 Bit VL-Bus SVGA Card | $79 |
| 16 Bit IDE I/O | $15 |
| 16 Bit SVGA Card | $59 |
| MFM (XT or AT) Controller | $29 |
| RLL (XT or AT) Controller | $29 |

## CASES + POWER SUPPLY

| | |
|---|---|
| Mini Tower w/230 Watt | $35 |
| Mid Tower w/230 Watt | $59 |
| Full Tower w/250 Watt | $79 |

## CD-ROM

| | |
|---|---|
| Panasonic/Mitsumi 2x | $119 |
| Teac/Toshiba 3x | CALL |
| Teac/Toshiba 4x | CALL |

## SOUND CARD

16 Bit Sound Blaster Compatible
Use For Panasonic + Mitsumi + Sony.....$65
Speaker 120 Watts .....$69

## TAPE BACK-UP

| | |
|---|---|
| Colorado 250MB | $159 |
| Conner 250MB | $159 |

## FAX/MODEM

| | |
|---|---|
| 14.4K V.32, V.42 Bit | $69 |
| 14.4K w/Voice Mail | $79 |

## DATA RECOVERY

| CAPACITY .MFM/RLL/IDE ESDI/SCSI | | CAPACITY .MFM/RLL/IDE ESDI/SCSI | |
|---|---|---|---|
| 20-39MB | $250 | 200-299MB | $500 |
| 40-49MB | $300 | 300-399MB | $550 |
| 50-89MB | $350 | 400-499MB | $600 |
| 90-159MB | $400 | 500-679MB | $650 |
| 160-199MB | $450 | 700-1GB | $850 |

**Specialize in Mac, DOS, Novell.**
**Data Recovery Includes: Repair of the Drive.**
**No Charge If We Are Unable to Recover Data.**

## MEMORY

**WE BUY & SELL & TRADE-IN NEW & USED & UNSURE MEMORY!!**

## SYSTEM REPAIR

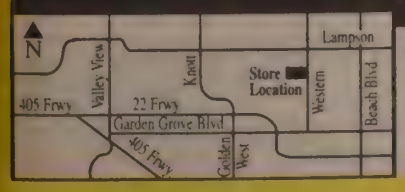
We Will Solve Any Problem On Your System!

**$40 + Parts**

## FLOPPY DRIVE REPAIR

| | |
|---|---|
| 5.25" (360K & 1.2MB) | $19 |
| 3.5" (720K & 1.4MB) | $19 |
| 3.5" PS/2 (720K & 1.4MB) | $35 |

# PRO COMPUTER COMPANY




12761 Western Ave., Suite B, Garden Grove, CA 92641

**TEL: 714/891-8293 • FAX: 714/891-3269**

Prices and specifications are subject to change w/out notice. 15% Restocking fee on returned items.

ONE YEAR WARRANTY PARTS & LIFETIME WARRANTY LABOR

Business Hours:
Mon.–Fri. 9:00–6:00
Sat. 10:00–2:00

## NEW FORMS OF VIRTUAL REALITY *continued from page 186*

wide-angle film or video camera lens, delivering an immersive hemispherical or spherical viewing environment on low-cost hardware. VTV technology, a proprietary set of real-time coded algorithms from Warp California, Inc., gives a single viewer or multiple participants the ability to freely look around within a single broadcast video signal.

This software-driven solution for spatial freedom works in much the same way as anamorphic lenses for cameras and projectors do for squeezing and unsqueezing wide-screen format motion pictures—only, here, in multiple dimensions. Unlike QTVR, which is digitally mapped, VTV is optically captured and rereleased by the software's decompression algorithms. VTV can be interactively viewed on a television, computer monitor, or a head-mounted display. Viewpoint control can be achieved using either a low-cost input device such as a mouse, joystick, or cable TV remote control, or with a headtracked head-mounted display (HMD). Limited zoom control can also be integrated into the application, although low-resolution source material will degrade display image sharpness.

At present, VTV works on any PC with standard VGA card at video rates, and on a fast Pentium with a PCI SuperVGA at beyond 70 frames/second. VTV demos are available from the Intel Multimedia Marketing Group (contact Raza Zaidi). A Macintosh version is in development. Demo disks are available to game developers and other interested parties from Warp California, Inc.

### FREE VR TOOL

VR is beginning to pop up all over the cybersphere. While cruising the Net recently, Morph Online—electro-id of *Morph's Outpost on the Digital Frontier* magazine—found news of a tool, based on Asymetrix's interactive multimedia authoring system Multimedia Toolbook v3.0. Called VRXplorer, it enables reproduction of a 360-degree view by editing a series of images previously captured using a video board.

VRX consists of the Author, with which you compose the various images in order to create the whole view, and the Player, containing the necessary objects and scripts to be included in your own software to play the view. VRX software is free for research purposes, and a "Virtual Visit to Venice" demo application is also available.

Software and further information are available at *http://www.univ.trieste.it/vrx/vrx.html* and soon at *ftp://ftp.cica.indiana.edu/pub/ pc/win3/toolbook/vrx11.zip* . The message was posted in the sci.virtual-worlds Internet newsgroup by Paolo Tosolini of Italy, email *tosolini@psicosun.univ.trieste.it* . ■

*Copyright © 1995 by Tony Reveaux. All rights reserved.*

### RESOURCES:

**Apple Computer, Inc.**
One Infinite Loop
Cupertino, CA 95014
(408)996-1010

**Warp California Inc.**
S.S. Vallejo
Varda Landing
Sausalito, CA 94965
(415)331-6203

**Simon & Schuster Interactive**
1230 Ave. of the Americas
New York, NY, 10020
1-800-983-5333


**NEW EXTERNAL IDE KITS**

*For CD-ROMs and Hard Drives to 2GB*

*Now you can add low-cost IDE peripherals externally to virtually any 16-bit ISA DOS PC, regardless of processor type, vendor, model, or age.*

- *Install without BIOS changes or IDE master/slave pinning*
- *Support full IDE performance*
- *Co-exist with IDE, SCSI, ESDI, RLL, and MFM controllers*
- *Power drawn from the host PC...eliminates need for power supply/fan*
- *Can be added to systems that are technically full*

CD-ROM KITS $69 qty. ten

HARD DRIVE KITS $64 qty. ten

***Kits Include...*** *enclosure, 16-bit secondary disk controller, Device Management Software, and quick-connect cable. CD-ROM kit uses standard software supplied by drive manufacturer and includes external RCA sound jack. Hard drive kit includes mounting hardware.*

**PCMCIA-ATA STORAGE**

***Now Get a 42MB Western Digital "Caviar" 1.8" Removable Hard Drive For Only $69.00...***

*Perfect for transporting data between portable and desktop* computers — or home and office PC's — the easy-to-use "Caviar" lets you carry all your files and applications on a removable credit card-sized disk drive.*

**ATA/X-IDE desktop PC Card Reader available for $69.00.*

1.8" REMOVABLE HARD DRIVE $69 WD CU-140

***Call Today — (714) 961-7000***

*Quantity Discounts ■ Dealer Inquiries Welcome*

*Prices are C.O.D. or Visa/Mastercard/American Express/Discover Card*

PCM®
4165 East La Palma Avenue, Anaheim, CA 92807
(714) 961-7000 ■ FAX (714) 961-0102



**Walnut Creek CDROM**
4041 Pike Lane,
Suite D-452
Concord, CA 94520
1-800-786-9907
1-510-674-0783
Fax: 1-510-674-0821
orders@cdrom.com

All Our Discs Are Unconditionally Guaranteed!!!

**Your Best CDROMs!**

| | | |
|---|---|---|
| Cica MS Windows CDROM | 4000 new Windows programs - quarterly updates | $ 29.95* |
| Giga Games CDROM | 3000 hot Games for MSDOS and Windows | $ 39.95* |
| Space and Astronomy CDROM | Thousands of NASA images and data files | $ 39.95* |
| C User Group Library CDROM | A collection of user supported C source code | $ 49.95* |
| Simtel MSDOS CDROM | Classic: 650 MB Shareware / Freeware for MSDOS | $ 29.95* |
| QRZ! Ham Radio CDROM | FCC Callsign Database for Win & DOS + files | $ 29.95* |
| Gifs Galore CDROM | 5000 mostly 640x480 GIF Images in every catagory | $ 39.95* |
| Gutenberg Project CDROM | Classic Literature and historical documents | $ 39.95 |
| Hobbes OS/2 CDROM | 600 MB always current Shareware/Freeware for OS/2 | $ 29.95* |
| Source Code CDROM | 650 MB of Unix & DOS source code for programmers | $ 39.95* |
| Internet Info CDROM | Thousands of computer, net, and internet documents | $ 39.95 |
| X11/GNU CDROM | X Windows and GNU software for Unix and SPARC | $ 39.95 |
| Aminet Amiga CDROM | 650 MB new Shareware/Freeware for Amiga | $ 29.95* |
| GEMini ATARI CDROM | 650 MB 3000 Programs for Atari - also for BBS use. | $ 39.95* |
| Ada CDROM | Programming tools, Ada source code and docs | $ 39.95* |
| Nova for NeXT CDROM | 600 MB black NeXT app's, src., docs, etc | $ 59.95* |
| Nebula for NeXTSTEP Intel | 600 MB NeXTSTEP Intel app's, docs, etc | $ 59.95* |
| Garbo MSDOS/Mac CDROM | MSDOS and Macintosh Shareware/Freeware | $ 29.95* |
| Fractal Frenzy CDROM | 2000 high resolution fractals - royalty free | $ 39.95 |
| FreeBSD CDROM | Berkeley BSD. 32bit O/S for PC, w/ GNU & X11. Src | $ 39.95 |
| Linux CDROM | Yggdrasil Linux. 32bit O/S for PC, w/ GNU & X11. Src | $ 49.95 |
| La Coleccion CDROM | MSDOS, OS/2, Windows. Spanish descriptions | $ 39.95* |
| Sprite CDROM | Berkeley's experimental Distributed OS for Sun's | $ 29.95 |
| CDROM Caddies | Standard type, highest quality. Lifetime guarantee! | $ 4.95 |

*Shareware programs require separate payment to authors if found useful.



Serving America's Most Endangered Children
**National Headquarters**
**408-971-4VCA**
P.O. Box 909 • Los Gatos, CA 95031-0909

2095 Park Avenue,
San Jose, CA 95126
**HAVE YOU SEEN THIS CHILD?**
**If so, please call!**
**800-VANISHED**
Sightings ONLY

**Ortez, Charmaine**
**Sarah Mae**

Date of Birth:
08-20-77

Date Missing:
03-12-94

Missing From:
San Jose, CA

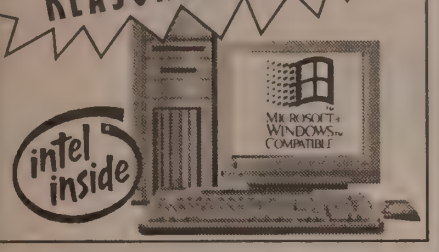
Brown Hair & Brown Eyes

Missing Type:
Runaway

Vanished Children's Alliance
OUR CHILDREN, OUR FUTURE

# PERFORMANCE AND PRICE...

**WE WILL MATCH ANY REASONABLE PRICE!**




## PCI/VLB

| | |
|---|---|
| 486DX4-100MHz PCI/VLB 256K C. w/420MB | $987 |
| 486DX2-80MHz PCI/VLB 256K C. w/420MB | $919 |
| 486DX2-66MHz PCI/VLB 256K C. w/420MB | $879 |
| 486DX2-50MHz PCI/VLB 256K C. w/420MB | $839 |

## EISA/VLB

| | |
|---|---|
| 486DX2-80MHz EISA/VLB 256K C. w/420MB | $957 |
| 486DX2 66MHz EISA/VLB 256KC.w/420MB | $917 |
| 486DX2-50MHz EISA/VLB 256K C.w/420MB | $877 |

## GREEN PC VLB

| | |
|---|---|
| Green PC 486DX4-100MHz VLB 256K C. w/420MB | $987 |
| Green PC 486DX2-80MHz VLB 256K C. w/420MB | $897 |
| Green PC 486DX2-66MHz VLB 256K C. w/420MB | $857 |
| Green PC 486DX2-50MHz VLB 256K C. w/420MB | $817 |

| | |
|---|---|
| 486SLC-75MHz VLB 256K C. w/420MB | $857 |
| 486SLC-66MHz VLB 256K C. w/250MB | $777 |
| 386DX-33MHz ISA 128K C. w/250MB | $677 |

## • BARE BONE SYSTEMS •

Includes: Mini Tower, IDE Controller, 2S/1P/1G, Keyboard

| | |
|---|---|
| 486DX4-100MHz 256K C. VLB w/1MB RAM | $408 |
| 486DX2-80MHz 256K C. VLB w/1MB RAM | 327 |
| 486SLC-75MHz 256K C. VLB w/1MB RAM | 298 |
| 486SLC-66MHz 256K C. VLB w/1MB RAM | 228 |
| 486DX2-66MHz 256K C. VLB w/1MB RAM | 297 |
| 486DX2-50MHz 256K C. PCI w/1MB RAM | 247 |
| 486DX2-80MHz 256K C. PCI w/1MB RAM | 358 |
| 486DX2-66MHz 256K C. PCI w/1MB RAM | 318 |
| 486DX2-50MHz 256K C. PCI w/1MB RAM | 278 |

## PENTIUM MULTIMEDIA

| | |
|---|---|
| Pentium 100MHz PCI/VLB 256K C | $2517 |
| Pentium 90MHz PCI/VLB 256K C. | $2367 |
| Pentium 75MHz PCI/VLB 256K C. | $2098 |
| Pentium 66MHz PCI/VLB 256K C. | $2038 |
| Pentium 100MHz PCI/ISA 256K C. | $2488 |
| Pentium 90MHz PCI/ISA 256K C. | $2357 |
| Pentium 75MHz PCI/ISA 256K C. | $2077 |
| Pentium 66MHz PCI/ISA 256K C. | $1999 |

Full Twr. Case w/10B Dr. Bays, 16MB RAM, 64 bit 1MB PCI Video, PCI Cntrl., 1.4 MB FD, 540MB IDE, 15" Shamrock NI Mntr., Dble. Speed CD-Rom, 16bit Snd. Card, Speakers, Microsoft Serial Mouse.
UPGRADE: 4x Speed CD ROM +$95

## 486DX MULTIMEDIA

| | |
|---|---|
| 486DX4-100MHz VLB 256K C. w/420MB | $1507 |
| 486DX2-80MHz VLB 256K C. w/420MB | $1437 |
| 486SLC-75MHz VLB 256K C. w/420MB | $1397 |
| 486DX2-66MHz VLB 256K C. w/420MB | $1397 |
| 486DX2-50MHz VLB 256K C. w/420MB | $1347 |

8MB Installed, S3 32Bit 1MB Video, 32Bit Enhncd. IDE Ctrl., 1.4M FD, 15" L/R .28 NI Mntr., 2x Speed CD ROM, 16 bit Snd. Crd., Spkers., Mse. UPGRADE: 4x Speed CD ROM +$95

## • CD-ROM •

| | |
|---|---|
| Panasonic Double Speed CD ROM | $125 |
| TEAC 4X Speed IDE CD ROM | 207 |
| Plextor 4X Speed SCSI CD ROM | 457 |
| 16 Bit Sound Card | 70 |

## • HARD DISK/TAPE BACKUP •

| | |
|---|---|
| 1.2MB FDD (5.25") | $47 |
| 1.4MB FDD (3.5") | 37 |
| 1.2/1.4MB Dual FDD | 97 |
| 2.88MB FDD (3.5") | 79 |
| 130MB IDE (17ms) | CALL |
| 170MB IDE (17ms) | 147 |
| 210MB IDE (14ms) | 165 |
| 345MB IDE (14ms) | 168 |
| 420MB IDE (13ms) | 195 |
| 560MB IDE (12ms) | 210 |
| 710MB IDE (12ms) | 277 |
| 850MB IDE (12ms) | 307 |
| 1.08GB IDE (10ms) | 418 |
| 1.08GB SCSI (10ms) | 467 |
| 1.80GB SCSI (10ms) | 858 |
| ST12550N 2.00GB 256K C. (10ms) | 1277 |
| ST15150N 4.00GB 256K (9ms) | 2197 |
| 250MB Tape Backup Internal | 149 |
| 350MB Tape Backup External | 357 |
| 420MB Tape Backup Internal | 197 |
| Conner 525MB SCSI 200kb/Sec | 470 |
| Sony 2GB Dat Tape Backup SCSI-2 | 767 |
| Sony 4GB/8GB Tape Backup | CALL |

## • MOTHERBOARD •

### CPU/RAM/MOTHERBOARD

| | |
|---|---|
| CPU-PENTIUM-100/90/75/66/60MHz | CALL |
| CPU-486DX4-100MHz, DX2-80/66/50/40MHz | CALL |
| Memory 4MB/8MB/16MB (30Pin, 72Pin) | CALL |
| Asus Dual Processor Pentium PCI/EISA 256K C. | $807 |
| Intel Pentium PCI/EISA/VLB 90/100MHz 256K C. | 508 |
| Intel Pentium PCI 90/100MHz 256K C. w/IDE I/O | 357 |
| Intel Pentium PCI 60/66MHz NCR SCSI 256K C. | 270 |
| Intel Pentium PCI 60/66MHz 256K C. | 225 |
| Opti Pentium PCI/VLB 90/100MHz 256K C. | 225 |
| Opti Pentium PCI/VLB 60/66MHz 256K C. | 208 |
| Opti Pentium VLB/ISA 60/66MHz 256K C. | 175 |
| SIS Pentium PCI/ISA 90/100MHz 256K C. | 208 |
| SIS Pentium PCI/ISA 60/66MHz 256K C. | 188 |
| 486DX-66/75/100MHz PCI/VLB 256K C. | 125 |
| 486DX-33/40/50/66MHz EISA/VLB 256K C. | 155 |
| 486DX-33/66MHz VLB 128K C. (30Pin 8Slots) | 85 |
| Green PC 486DX-33/66/80/100MHz VLB 256K C. | 97 |
| Vega Gr.PC 486DX-33/66MHz VLB 256K C. | 157 |
| Vega Gr.PC 486DX-33/100MHz VLB 256K C. | 178 |

### MOTHERBOARD w/CPU

| | |
|---|---|
| Intel Pen-PCI/EISA/VLB 256K C. w/100MHz CPU | $1267 |
| Intel Pentium PCI 256K C. w/100MHz CPU | 1097 |
| Intel Pentium PCI 256K C. w/90MHz CPU | 957 |
| Intel Pentium PCI 256K C. w/75MHz CPU | 687 |
| Intel Pentium/PCI 256K C. w/66MHz CPU | 527 |
| Opti Pentium PCI/VLB 256K C. w/100MHz CPU | 967 |
| Opti Pentium PCI/VLB 256K C. w/90MHz CPU | 827 |
| Opti Pentium PCI/VLB 256K C. w/75MHz CPU | 568 |
| Opti Pentium PCI/VLB 256K C. w/66MHz CPU | 517 |
| SIS Pentium PCI/ISA 256K C. w/100MHz CPU | 957 |
| SIS Pentium PCI/ISA 256K C. w/75MHz CPU | 547 |
| SIS Pentium PCI/ISA 256K C. w/66MHz | 497 |
| Green PC VLB 486DX4-100MHz 256K C. w/CPU | 337 |
| Green PC VLB 486DX2-80MHz 256K C. w/CPU | 267 |
| Green PC VLB 486DX2-66MHz 256K C. w/CPU | 237 |
| Green PC VLB 486DX2-50MHz 256K C. w/CPU | 197 |
| VESA LB 486DX2-66MHz w/CPU (30Pin 8Slots) | 217 |
| VESA LB 486DX2-50MHz w/CPU (30Pin 8Slots) | 187 |
| Vega Green PC VLB 486DX-100/66/50/33MHz 256K C. | 447 |
| Vega Green PC VLB 486DX2-66MHz 256K C. w/CPU | 357 |
| PCI/VLB Green PC 486DX2-100MHz 256K C. w/CPU | 367 |
| PCI/VLB Green PC 486DX2-80MHz 256K C. w/CPU | 287 |
| PCI/VLB Green PC 486DX2-66MHz 256K C. w/CPU | 237 |
| PCI/VLB Green PC 486DX2-50MHz 256K C. w/CPU | 207 |
| EISA/VLB 486DX4-100/DX2-80MHz | 167 |
| EISA/VLB 486DX2-66MHz 256K C. w/CPU | 277 |
| IBM 486SLC2-75MHz VLB 256K C. w/P5 Socket | 227 |
| IBM 486SLC2-66MHz VLB 64K Ext. w/Math Co. | 159 |
| AMD 386DX-40MHz w/128K Cache | 90 |

## • MONITORS •

| | |
|---|---|
| Edition 14" Amber | $89 |
| Edition 14" White | 89 |
| 14" SVGA .39dp 1024x768 | 187 |
| 14" 1024x768 .28dp Interlaced | 195 |
| Shamrock 14" (1024x768) .28DPI N-I | 225 |
| Shamrock 15" (1280x1024) .28DPI N-I | 317 |
| Optiquest 15" 1280x1024 .28dp N-I | 307 |
| Sceptre CD-615GL 15" Energy .28dp N.I. | 355 |
| Optiquest 17" 1280x1024 .26dp N-I. | 579 |
| Shamrock 20" 1280x1024 .28dp N.I. | 1179 |

## • NETWORK •

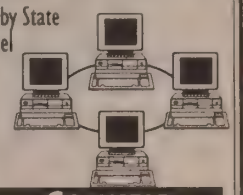
### NETWORK PRODUCTS

**Are You Planning a New Network?**
**Are You Upgrading a Current Network?**
**Want to Add Windows for Workgroups?**
**Find Out the Hidden Costs of Upgrading!**
**Get These and Other Questions Answered By Our Network Staff!**

| | |
|---|---|
| Ethernet NE2000 Coax Card | $49 |
| Ethernet NE2000 10 Base-T, Twisted Pair | 49 |
| Novell NE2100 Bus Master NIC (10 Base-2 (BNC)/10 Base-5 (AUI)) | 49 |
| Lantastic A15.0 Single For Windows/DOS | 88 |
| Concentrator, UPS, LANSoftware | CALL |

**COMPLETE NETWORK SOLUTIONS**

- Service & Support
- Installation Done by State Licensed Personnel
- FREE Estimate
- Novell Engineer
- Reference on Demand
- Demo Available



## • THE SUPER COPYSTAR • DISKETTE DUPLICATORS/ FORMATTERS

DC-506/DC-506H
5.25" TARGET FDDx6

DC-3010/DC-3010H
3.5" TARGET FDDx10

### FUNCTIONS:

- Copy • Brief Copy • Loading Copy • Format • Compare
- Verify • Head Cleaning • Head Alignment • Set Track No.
- Set Re-Try No. • Write-Protection Override
- Power-On Self-Test • Master Drive Selectable

### AUTOLOADER AVAILABLE!

ADC-301S (Standalone) • ADC-301SN (Network)

**CALL FOR MORE DETAILS!**

## • VIDEO •

| | |
|---|---|
| MGP | $15 |
| VGA 256K 16 Bit | 35 |
| Trident SVGA 512K 16Bit | 45 |
| Trident SVGA 1MB 16Bit | 61 |
| S3 Windows Accelerator 1MB 32Bit VLB | 72 |
| Diamond Speed Star Pro SE VL 32Bit 1MB | 127 |
| Diamond Speed Star Pro SE PCI 32Bit 1MB | 127 |
| Diamond Viper SE 64Bit PCI 2MB VRAM | 277 |
| Diamond Stealth PCI 64Bit 1MB DRAM | 148 |
| Diamond Stealth PCI 64Bit 2MB DRAM | 197 |
| Diamond Stealth VLB 64Bit 1MB DRAM | 167 |
| Diamond Stealth VLB 64Bit 2MB DRAM | 209 |
| Diamond Stealth VLB 64Bit 2MB VRAM | 317 |
| Diamond Stealth PCI 64Bit 2MB VRAM | 310 |
| Diamond Speed Star PCI 64Bit 1MB DRAM | 149 |
| ATi Mach 32 Wonder VLB 1MB DRAM | 127 |
| ATi Mach 64 Winboost VLB 2MB DRAM | 219 |
| ATi Mach 32 Ultra Plus PCI 1MB DRAM | 127 |
| ATi Mach 64 Winboost PCI 2MB DRAM | 219 |
| ATi Mach 64 Winturbo VLB 2MB VRAM | 307 |
| ATi Mach 64 Winturbo PCI 2MB VRAM | 307 |
| ATi Mach 64 Winturbo PCI 4MB VRAM | 527 |
| Spider PC-II 64Bit PCI 1MB | 129 |
| Spider PC-II 64Bit PCI 2MB | 177 |
| Spider PC-II 64Bit VLB 2MB | 177 |
| Spider Tarantula 64Bit PCI/VLB 4MB VRAM | 425 |
| IDE w/I/O 16Bit | 15 |
| IDE w/I/O 32Bit | 25 |
| IDE w/I/O 32Bit Enhanced | 35 |

## ALL SYSTEMS ABOVE INCLUDE:

- 4MB RAM of High Speed 70ns
- 1024 x 768 SVGA card
- 1.4MB Floppy Drive
- 1 Parallel, 2 Serial, 1 Game Port(s)
- 14" SVGA Color Monitor
- BTC 101 Key Enhanced Keyboard
- Desktop or Mini Tower Case w/Digital Display
- Serial Mouse

## VIDEO UPGRADE

| | |
|---|---|
| • ATI Wonder Mach 32 VLB 1MB | $97 |
| • Diamond Stealth 64 VLB 2MB | 177 |
| • Diamond Stealth 64 PCI 2MB | 157 |
| • ATI Ultra Plus PCI 1MB | 97 |
| • PCI 32 Bit 1MB Video | 79 |
| • PCI IDE HD Controller | 19 |
| • 32-bit SVGA VESA LB 1MB Video | 39 |
| • 32-bit IDE VESA LB Cntrl. | 15 |

## HARD DISK

| | 420MB |
|---|---|
| • 540MB IDE HD | $38 |
| • 730MB IDE HD | 99 |
| • 1.08GB IDE HD | 217 |

## MONITOR UPGRADE

| | |
|---|---|
| • Nasonic 14" N.I. 1024x768, .28dp | $65 |
| • Shamrock 15" N.I. 1280x1024, .28dp | 168 |
| • Sony 155F 15" N.I. 1280x1024, .25dp | 319 |
| • CTX 17" N.I. Low Radiation, .28dp | 418 |
| • MAG DX-17 N.I. LCD Green, .28dp | 510 |

# ACI COMPUTERS

205 W. FIRST STREET • SUITE #106 • TUSTIN, CA 92680
HOURS: Mon.-Fri. 10-6, Sat. 10-5
Prices subject to change, FINANCING AVAILABLE

**(714) 838-4443**
FAX: (714) 838-5055
FINANCING AVAILABLE
SALES & SERVICE & NETWORKING

**SINCE 1987**
ACI's commitment to YOU provides a full 1 YEAR WARRANTY on LABOR and PARTS, 72 HOURS BURN-IN TIME and QUICK DELIVERY with UPGRADES AVAILABLE!

# Tools For Creating Believable Animation

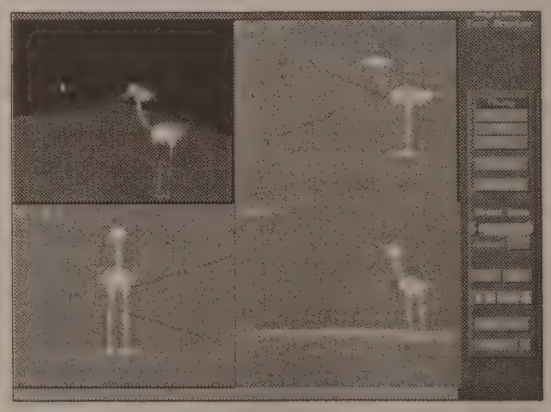
## New Features Can Be Plugged Directly Into Autodesk 3D Studio Release 4

Our eyes and minds can easily discern realistic, lifelike movement from the artificial. We've all seen the jerky-legged gait of computer-animated mannequins. But even the tiniest details in computer animation are swiftly noted and found to be credible or tossed out as impostors. Because we are so adept at detecting subtlety and nuance, creating believable motion is one of the biggest challenges in creating quality animation. 3D Studio, Autodesk's 3-D modeling and rendering package, offers two new powerful tools for creating more believable movement in animation with the introduction of Inverse Kinematics and a new language called Keyscript.

Release 4 is being called the plug-in upgrade because many of its improvements are "plugged directly in" to 3D Studio through its open architecture design (IPAS technology).

In general, there are several methods that can be used to create lifelike movement in animation. Disney and other traditional animation studios have used a technique in cartoons called rotoscoping. Rotoscoping involves tracing movement, such as a dancer's steps, frame-by-frame from live-action film. Those traced drawings are then applied to the cartoon characters so that they will move in the same fluid ways as the "filmed" characters.

Electronic motion tracking sensors can be used to achieve realistic fluid motion in computer graphics. These hardware devices are placed on a person walking, for example. That walking motion can be recorded with software and transferred to the computer model, making it walk with the same motion as the real person. Schreiber Institute sells a 3D Studio Plug-in CD-ROM for this purpose called Puppeteer.



**Randy the walking Egret in the Fast-Preview window from the Release 4 inverse kinematic tutorial**

### PHYSICAL-BASED MODELING

Lacking sophisticated external hardware, an animator can replicate motion by means of physical-based modeling methods, which borrow physical properties or rules from the fields of mathematics and physics.

Constraints are one of these borrowed rules. A constraint is like a limit. Think of an arm. If you have a person in your animation you want their arm to move in exactly the directions that it would in real life and you also want to stop it from moving in any unnatural way. This is accomplished with constraints, which are set by defining the degrees of freedom (DOFs). DOFs are the number of ways in which the arm is "constrained" to move.

### THE IK PLUG-IN

Inverse kinematics (IK) is an advanced physical-based modeling method that is used to link and move jointed objects. Using the arm as an example

*continued on page 199*

BY PAMELA MASON

FUTURE COMPUTING SOLUTIONS INCORPORATED

Hewlett Packard Authorized Dealer · Compaq Authorized Dealer · In Touch with Tomorrow TOSHIBA · Apple Authorized Reseller · IBM Authorized Dealer · SHARP Authorized Dealer · NEC Authorized Dealer · AST Authorized Dealer

## T4900CT: The Advanced Multimedia Notebook

- Blazing Fast 75MHz Intel Pentium
- Multimedia Ready: 16 bit WAV & MIDI Audio, built in Microphone and Speaker, Audio Jacks, and Pre-installed Windows Sound System.
- 810MB Hard Disk Drive
- 8MB of Standard RAM
- Pentium 75MHz

75MHz $CALL

## T3600CT

50MHz, i486DX2, PCMCIA Active Color

250MB $3298
500MB $3698

## Apple Power Macintosh 6100/66

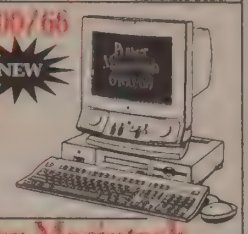
$CALL For pricing and configurations

NEW

## Power Macintosh 7100/80

80MHz Power PC 601 Microprocessor

$CALL For pricing and configurations



Installation · Administration · Service · Support · Training

Novell Certified NetWare Engineer

- Novell Certified Engineer
- Complete Hardware & Software System Integration
- Network Upgrade & Maintenance
- Cabling

*The Ultimate Combination of Sight, Sound & Processing Power in a Notebook Computer*

## T4800CT

75MHz, i486DX4, 8MB, Active Color, 2 PCMCIA Slots

510MB $3998

## T4700CT

50MHz, i486DX2, 8MB, Active Color, 2 PCMCIA Slots

320MB $3098

T4850CT 510/810 ..... $4398/4698

## T2150CD
## T2150 CDT

NEW

Hollywood DX4, 100MHz, 8M, Built-in CD ROM Dr.

$CALL$

## T1960CS

50MHz, i486DX2, 4MB,

320MB $2098

## T1960CT

200MB $2398
320MB $2598

## POWER BOOKS

| | |
|---|---|
| PB 520 4/160 | $1788 |
| PB 520C 4/160 | $2288 |
| PB 520C 12/320+Modem | $2988 |
| PB 540C 4/320 | $3628 |
| PB 540C 12/500+Modem | $4438 |

## Power Macintosh 8100/100

100MHz Power PC 601 Microprocessor

NEW

## Power Macintosh 8100/110

110MHz Power PC 601 Microprocessor

NEW

CALL
For pricing and configurations

## T 4400SX

25MHz, 486SX, 2MB, DX Upgradable Notebook

80MB $898*
120MB $998*

*Factory Refurbished

*Ultra Portable Notebook*

## T2450CT

75MHz, i486DX4, 8MB, Dos, WIN, Mouse, SCSI, PCMCIA, Active Color, 500MB

320MB $3898
500MB $4198

## T3400CT

33MHz. i486SX, 4MB, PCMCIA, 4.4 lbs.,

Active Color
120MB $1798
250MB $2098

## T6600C

Advanced Portable Computer 66MHz, i486DX2, 8MB,

Active Color
510MB
$CALL
510MB-CD
$CALL

## POWERBOOK DUO SPECIAL

Duo 270C 4/240
Active Matrix Color

68030/33MHz
$2288

## Quadra 630

33MHz 68040 CPU

Power PC Upgradable

4/250 $1078

## POWER PC SPECIALS

| | | |
|---|---|---|
| 8/160 | 6100/60 | $1128 |
| 8/250-CD | 7100/66 | $2078 |
| 16/250-SW | 7100/66 | $2548 |
| 8/500-CD | 7100/66 | $2228 |
| 16/500-CD-AV | 7100/66 | $2728 |

## T1910CS

33MHz, i486SX, 4MB. DOS, Win, Mouse, PCMCIA, Mono/Color

200MB $1348
200MB/CS $1698

## T4400DXC

1486DX, 25MHz, 9.5"ActiveColor

200MB $1898

## T4500C

1486SX, PCMCIA, Active Color

120MB $1498*
200MB $1598*

*Factory Refurbished

## T6400MM/C

Advanced Multimedia Computer, 50MHz, i486DX2, 4MB, Active Color, Mambo Card, Multimedia Software, Speakers, Samsonite Case

200MB $4998

## T1900 Mono/Color

20MHz, 486SX, 4MB, DOS, Win, Mouse, Claris Works, Lotus Organizer, Case

120MB $1098*
120MB/C $1298*

*Factory Refurbished

GREAT DEAL! THINKPAD 510CS 4/200 $1698

## IBM THINKPAD

300/350/360/500/750/755
MONOCHROME & COLOR
CALL FOR PRICE

## T2400CT

50MHZ, i486DX2, 8M, DOS, Win, Mouse, SCSI, PCMCIA Slots Active Color

250MB $2898
320MB $2998

## T2400CS

50MHZ, i486DX2, 4M, DOS, Win, Mouse, SCSI, PCMCIA Slots, Color

250MB $2448
320MB $2548

## T1950CT

40MHZ, i486DX2, 4M, DOS, Win, Mouse, PCMCIA, Active Color

200MB $1998*
320MB $2198*

## T1950CS

200MB $1898*

*Factory Refurbished

## T4700CS

50 MHZ, i486DX2, 8MB, Color, 2 PCMCIA Slots,

200MB $2698*
320MB $2798*

*Factory Refurbished

## Absolutely Guaranteed Low Prices

THERMAL-TRANSFER/PHASE-CHANGE/DYE SUBLIMATION PRINTERS

### TEXTRONIX® Phaser 200e

- Highest Quality 300dpi
- Ideal Low cost color
- High Quality Thermal-transfer

$CALL

### TEXTRONIX® Phaser 220e

- World's first 600x300dpi
- 8MB standard memory
- Thermal-Transfer

$CALL

### TEXTRONIX® Phaser 220i

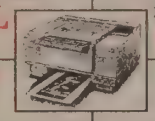
- Great for overhead transparencies & reports
- The Phase 220i was named PC Computing's BEST NETWORK COLOR PRINTER in June 1994
- 10MB standard memory

$CALL

### TEXTRONIX® Phaser 300i

- Phase-change technology
- Color printing on any paper
- 10MB standard memory
- 39 Resident fonts

$CALL



### TEXTRONIX® Phaser III PXI

- Rich vibrant color printing on any paper
- TEXTRONIX® phase-change color printers are the world's most award winning color printers

$CALL

### TEXTRONIX® Phaser 440

- Dye sublimation
- MacWorld editor's choice July 1994
- 32MB standard memory
- Features large formmat output big enough for two page spreads with full bleeds

$CALL

### TEXTRONIX® Phaser 440

- Dye sublimation
- Standard memory
- Single-page output large enough for full-bleed images

$CALL

### TEXTRONIX® Phaser II SDX

- Highest quality 300dpi
- Prints photo realistic colors on letter & legal sized media
- High Quality dye-sublimation continuous tone output

$CALL

CALL FOR TEXTRONIX ACCESSORIES IN STOCK!

## SALES ❖ SERVICE ❖ RENTALS ❖ LEASING

### COMPAQ LTE SERIES

ELETE 4/50 CX DS2-50MHz
8/340 $4248*

ELETE 4/75CX DX4 - 75MHz
8/340 $4648*
8/510 $4948*

*Price includes $700 Smartstation Dock

### DESKPRO XE 466

66MHZ, i486DX2, 8MB, DOS, Win, Mouse, TW

525MB
$2088

### DeskPro XE 450

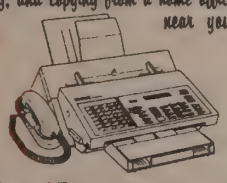
50MHz, i486DX2, 8MB, DOS, Win, Mouse, TW

340MB $1888

*New printing, faxing, and copying from a home office near you.*

## HP OfficeJet $788

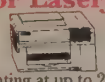
## HP Fax-950 $798



- No More Flimsy Thermal Faxes to recopy
- HP Quality & Reliability

*Laser color your whole office can share. The speedy, new HP Color LaserJet printer from FCS.*

## HP Color LaserJet Printer



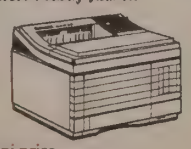
- Fast Color printing at up to 2 ppm
- Fast Black/monochrome printing at up to 10ppm
- Features eight full colors and millions of halftone colors

$CALL

*FCS Presents the New Standard in Laser Printing from HP*

## HP LaserJet 4 Plus Printer $1378

## HP LaserJet 4M Plus Printer $1898



- 600dpi print quality at a 300dpi price
- Fast 12-ppm printing for Complex Documents
- Full Network Capabilities (w/options)
- Optional Duplex Printing

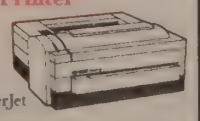
*FCS Makes Great Performance Affordable With the HP LaserJet 4L Printer*

## HP LaserJet 4L Printer

$538* *With $100 Mail-In Rebate

## HP LaserJet 4ML Printer

$978

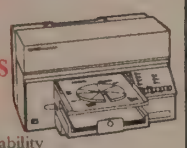


- 300dpi text & graphics w/ 1MB Memory
- Lowest Priced HP LaserJet Printer...EVER!

*Now, See Why Color Printing is practical for Your Everyday Document.*

## HP DeskJet 1200C $998

## HP DeskJet 1200C PS $1548



- LaserJet Compatible for Convenient Document Portability
- Easy Set-Up w/ built-in Support for Windows & PC Applications.

*Big Budget Looks, Small Budget Price*

## HP DeskJet 540
## HP DeskWriter 540

$288

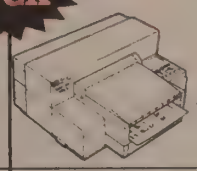
IN STOCK

- Laser-Quality Printing at a Dot Matrix Price for Affordability. 600 x 300 DPI up to 3-ppm output

*Price Breakthrough on the HP DeskJet 560C Printer!*

## HP DeskJet 560C Inkjet Printer $478

## HP DeskWriter 560C Inkjet Printer $478



- 600x300 dpi. Black & Color Printer, 35 Scaleable True Type Fonts

*What are you waiting for? Get documents in half the time with the new 16-ppm HP LaserJet 4V/MV printer, now at FCS*

## HP LaserJet 4V Printer $CALL

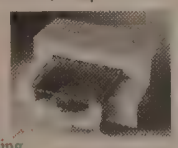
## HP LaserJet 4MV Printer $CALL

- 16-ppm engine and 33-MHz RISC processor for faster printing
- Wide-format printing on 11" x 17" paper
- HP Quality and reliability

*FCS Presents the HP DeskJet Portable Printer for People on the Go.*

## HP DeskJet 320 $298

## HP DeskWriter 320 $298



- 300dpi, Laser-Quality Printing
- Up to 3ppm, 100 pages per single charge
- Weight just 4.4lbs. Color Option add $38

SPECIAL

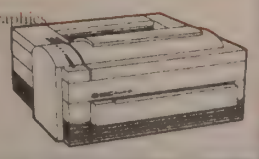
## HP LaserJet 4Si Printer
## HP LaserJet 4Si MX Printer

- True 600x600 dpi printing w/ REt & microfine toner
- HP JetAdmin allows easy remote operation Novell NetWare

IN STOCK

## HP LaserJet 4P Printer $928

## HP LaserJet 4MP Printer $1298

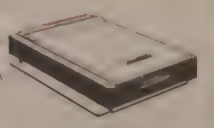


- 600 dpi Text and Graphics
- 4 pages per minute

*FCS Introduces a New Resolution in Scanning*

## HP ScanJet IIcx Scanner

IBM/MAC $798*



- Ideal for both Monochrome & Color graphics & text
- [illegible] dpi resolution
- Enhanced O.C.R. Accuracy w/HP Accu-Page Technology

## HP ScanJet 3P $488

*With $150 Mail-In Rebate

Mon.-Fri. 8-5
Closed Sat.-Sun.

# Future Computing Solutions Inc.

22835 Savi Ranch Pkwy, Ste. C, Yorba Linda, CA 92687
Tel:714/282-9100 • Fax:714/282-9400

Advertised Prices Reflect 3% Cash Discount. Corporate & Aerospace Purchase Orders accepted. Prices & Availability subject to change without notice. Additional discounts to qualified faculty & research staff. FCS is not responsible for any typographical errors. Apple, the Apple logo, AppleTalk, LocalTalk, Macintosh, Centris, Duo, Powerbook, and Quadra are trademarks of Apple Computer, Inc.

# CD Titles IN STOCK

| | |
|---|---|
| 3ft 6PAK | $25 |
| 7th Guest | 15 |
| AAA Trip Planner | 17 |
| Adventures with OSLO | 13 |
| Aegis | 23 |
| Aesop's Fables & Wonderella | 12 |
| Aladdin & the Wonderful Lamp | 12 |
| A Line in the Sand | 15 |
| All You Can Play | 8 |
| Amazing Anim | 13 |
| Amazing Heritage Talking Dictionary | 19 |
| Animation Fair | 12 |
| Animals | 12 |
| Arthur's Birthday | 33 |
| Arthur's Teacher Trouble | 13 |
| Ask Alice | 13 |
| Audubon's Birds | 12 |
| Audubon's Mammals | 12 |
| Battle Chess Enhanced | 16 |
| Berlitz Think & Talk (7 CDs) | 89 |
| Best of Micropros (Rail Road Tycoon, Pirates, Rex Nebular Command HQ) | 14 |
| Bioodnet | 22 |
| Blue Force | 18 |
| Business 500 | 16 |
| Butterflies | 12 |
| Butterflies of the World | 15 |
| Central Intelligence | 18 |
| C.H.A.O.S Continuum | 12 |
| Comanche | 25 |
| Communication Master | 8 |
| Compton's Interactive 95 | 20 |
| Compton's Family Choice | 14 |
| CookBook Heaven | 14 |
| Corel Draw 4 | 149 |
| Corel Gallery | 35 |
| Critical Path | 17 |
| CyberRace | 14 |
| Dark Legions | 17 |
| Day of the Tentacle | 17 |
| Deathstar Arcade Battles | 10 |
| Deluxe Pack 4 (U.S /World Atlas, Typing Tutor, Chess 4000) | 15 |
| Dictionary of the Living World | 14 |
| Dinosaur Encyclopedia | 14 |
| Doom Companion Edition | 13 |
| Dracula Unleashed | 19 |
| Dr. Games | 9 |
| Dr. Music | 11 |
| Dr. Shareware | 9 |
| Dr. T's Sing Along | 12 |
| Dr. Windows | 9 |
| Dragon's Lair | 24 |
| Dune | 15 |
| Encore (3 games) | 19 |
| Europe Alive | 13 |
| Family Doctor 3rd Ed | 14 |
| Family Education Collection | 14 |
| Family Fun | 8 |
| Family Pharmacist | 17 |
| Farm Animals | 12 |
| Forever Growing Garden | 18 |
| Fractal Frenzy | 15 |
| Gabriel Knight | 17 |
| Game Collection | 9 |
| Game Galore | 8 |
| Games Graphics Utilities | 8 |
| Game Library | 10 |
| Geekwad | 18 |
| Goblins 1 | 15 |
| Goblins 2 | 15 |
| Graphic Works | 20 |
| Great Cities of the World Vol 1 & 2 | 13 |
| Great Mysteries | 15 |
| Grolier's Encyclopedia 6.0 | 15 |
| Grooves | 15 |
| Gus Goes to CyberTown | 12 |
| Health and Medical Industry Directory | 10 |
| Heather Hits her First Home Run/ Moving gives me a Stomach Ache | 12 |
| Helcab | 25 |
| Hell | 18 |
| High Techtures | 14 |
| Hobbe OS/2 | 15 |
| Homebrewing Guide | 22 |
| Home Improvements | 15 |
| How the World Works | 18 |
| I Can Speli | 12 |
| Image Warehouse | 15 |
| Inca | 14 |
| Indiana Jones | 15 |
| Infopedia | 19 |
| Internet Tools | 16 |
| Iron Helix | CALL |
| Jazz | 15 |
| Jutland | 19 |
| Jones In The Fast Lane | 12 |
| Journeyman Turbo | 18 |
| Just Grandma And Me | 15 |
| Kids Farm | 12 |
| Kings Quest V | 10 |
| Kings Quest VI | 15 |
| Kodak Photo CD | 12 |
| Larry & the Haunted House | 33 |
| Languages of the World | 14 |
| Last Dinosaur Egg | 15 |
| LawnMower Man | 15 |
| Legal Guide | 14 |
| Linux (Developers Resource) | 16 |
| Little Monster at School | 33 |
| Loom | 11 |
| Lord of the Rings | 19 |
| Lumicus | 15 |
| MacMillan Dictionary | 15 |
| Mad Dog McCree II | 18 |
| Magic Death | 13 |
| Man Enough | 20 |
| Mantis | 10 |
| Mario's Missing (DELUXE) | 12 |
| Mathematic's Library | 13 |
| Mayo Clinic | 14 |
| Mega Race | 15 |
| Microcosm | 15 |
| Microsoft Cinemania 94 | 29 |
| Monarch Notes | 15 |
| Monkey Island | 12 |
| Morphology 101 | 18 |
| Mozart | 10 |
| MPC Wizard 3.0 | 15 |
| MS Bookshelf 94 | 30 |
| MS Dangerous Creatures | 26 |
| MS Dinosaur | 25 |
| MS Encarta 95 | 30 |
| MS Money | 14 |
| MS Multimedia Beethoven | 29 |
| MS Multimedia Mozart | 29 |
| MS Multimedia Schubert | 29 |
| MS Musical Instruments | 25 |
| MS Works | 30 |
| Multimedia Family Bible | 18 |
| Multimedia US History | 18 |
| Music Shop Pro | 15 |
| Myst | 25 |
| Nat. Geographic Mammals | 15 |
| National Parks | 14 |
| New Kid on the Block | 34 |
| Nomad | 16 |
| Ocean Below | 12 |
| Operation Desert Storm | 10 |
| Outpost | 23 |
| Ozzies World | 15 |
| Parenting | 14 |
| Pharm Assist | 25 |
| Platinum Collection | 9 |
| Plug & Play Linux | 22 |
| Puzzle Puzzle | 12 |
| Quantum Gate | 17 |
| Quick & Easy Spanish | 18 |
| Rainbow Children Park | 12 |
| Rebel Assault | 25 |
| Return of the Phantom | 18 |
| Return to Zork | 13 |
| Reunion | 18 |
| Ringworld | 18 |
| Rise of the Robots | 23 |
| Ruff's Bone | 33 |
| Scary Peoms for Rotten Kids/A Long Hard Day on the Ranch | 14 |
| Select Phone | 69 |
| SFX | 13 |
| Shuttle | 20 |
| SimCity 2000 | 15 |
| Source Code (Walnut Creek) | 16 |
| Space & Astronomy (Walnut Creek) | 17 |
| Space Shuttle | 13 |
| Spiders | 12 |
| Star Trek 25th Anniversary | 20 |
| Starwars Chess | 15 |
| Street Atlas USA | 65 |
| Sub War 2050 | 19 |
| Syndicateplis | 29 |
| TFX | 25 |
| The Best Caching Software | 8 |
| The Bible Library | 19 |
| The Cat Came Back | 15 |
| The Hord | 19 |
| The Journey man project | 15 |
| The Legend of Kyrandia | 25 |
| The Paperbag Princess & Mudpuddle | 12 |
| The Psychotron | 15 |
| The Tale of Benjamin Bunny | 12 |
| The Zoo | 16 |
| Timetable of History Arts & Entertainment | 15 |
| Timetable of History Business Politics & Media | 15 |
| Time Almanac Reference Edition | 17 |
| Tool Kit for Linux | 22 |
| Tornado | 23 |
| Tortoise and the Hare | 34 |
| Tuneland | 22 |
| Twains World | 15 |
| UFO | 2 |
| US Air Power | 10 |
| US Aircraft Carriers | 10 |
| US Battle Tanks | 10 |
| USA Today | 12 |
| US History | 15 |
| Wacky Funsters | 18 |
| Walnut Creek Titles | 14 |
| Whales | 12 |
| What Air Can Do | 12 |
| Where in the world is Carmen San Diego | 15 |
| Who Killed Breet Denunce? | 15 |
| Who Killed Taylor French? | 15 |
| Who Shot Johnny Rock | 20 |
| Wolf 3D-D Mania | 12 |
| World Circuit | 15 |

## EINSTEIN Multimedia Pack™ ..... $379

Toshiba 4 Plex Quad Speed, Multisession
SoundBlaster 16 SCSI-2
Seek Time: 120MS Transfer Rate: 600KB/S

## Professional Multimedia Pack™ .... $299

Toshiba Triple Spin, Multisession
SoundBlaster 16 SCSI-2
Seek Time: 195MS Transfer Rate: 450KB/S

## INTELLECT Multimedia Pack™ ..... $269

Teac or Mitsumi Quad Speed, Multisession
SoundBlaster 16 MCD
Seek Time: 195MS Transfer Rate: 600KB/S

## CLASSIC Multimedia Pack™ ..... $199

Sony or Mitsumi FX001-D Double Spin, Multisession
SoundBlaster 16 MCD
Seek Time: 250MS Transfer Rate: 350KB/S

All of the above packages include one pair of Amplified Speakers & 19 CD Titles: Grollier's Encyclopedia, RoboCop 3D, ChessMaster 2100, World Atlas V.4, Epic, Mario is Missing, Push-Over, Life & Death 2, Mario's Time Machine Deluxe, D/Generation, Contraption Zack, Might & Magic II, Dictionary of Quotable Definitions, Webster's New World Dictionary, Guide to Concise Writing, Desk Reference Dictionary of 20th Century History, Webster's New World Thesaurus, The National Directory, Legal & Corporation Forms.

# EINSTEIN The

## CD ROM

| | |
|---|---|
| Toshiba 3501 Quad Speed 120MS 600KB | $259 |
| Toshiba 3XI SCSI | 185 |
| NEC CDR 510 3XI 195MS 450KB Per Sec SCSI | 185 |
| NEC CDR 210 320MS 300KB Per Sec SCSI | 125 |
| Sony CDU55E 250MS 350KB/S NEW IDE | 105 |
| Panasonic 562 Double Spin 320MS, 300KB/S | 109 |
| Plextor 4 Plex Quad Speed w/1MB Buffer | 389 |
| Mitsumi Quad Speed | 179 |
| TEAC Quad Speed | 179 |

**CALL FOR EXTERNAL CD ROM DRIVES**

## Sound Cards

| | |
|---|---|
| SoundBlaster 16 Basic | $85 |
| SoundBlaster 16 MCD | 75 |
| SoundBlaster 16 MCD ASP | 135 |
| SoundBlaster 16 SCSI-2 | 99 |
| SoundBlaster 16 SCSI-2 ASP | 159 |
| SoundBlaster AWE 32 ASP | 259 |

## Modems

| | |
|---|---|
| Rockwell 14,400 INT FAX MODEM | $54 |
| U.S. Robotics 14.4 Internal Fax Modem/Ext | 97/115 |
| MAXTech 14.4 Int Voice Fax Modem | 59 |
| MAX Tech28.8 Int FAX MODEM/EX | 109/125 |

## Controller Cards

| | |
|---|---|
| IDE ISA Controller 2FD, 2H, 2S, 1P, 1G Port | $13 |
| Enhanced IDE, VLB Controller 2FD, 2HD, 2S, 1P, 1G Port | 20 |
| PCI Enhanced IDE, I/O Controller | 30 |
| VLB IDE w/16550 UART 4HD, 2FL, 2S, 1P, 1G | 45 |
| ISA IDE w/16550 UART | 39 |
| NCR 810 PCI SCSI | 69 |
| NCR PCI Wide SCSI | 125 |
| Adaptec PCI 2940 | 195 |
| Adaptec PCI 2940W | 235 |
| Adaptec VL8 2842 | 179 |
| Adaptec VL8 SCSI | 100 |

## Cases

| | |
|---|---|
| Mini | $35 |
| Medium Tower | 55 |
| Full Tower | 69 |
| DeskTop | 55 |

## Keyboard

| | |
|---|---|
| 101 SoftTouch Keyboard | $15 |
| Focus 2001 Keyboard | 32 |
| Focus 8000 Keyboard | 39 |
| Focus 9000 Keyboard | 49 |

## Mouse

| | |
|---|---|
| Hi-Res. Mouse Qtronics | $10 |
| Ms Mouse | 29 |

## FOR ADULTS ONLY

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Adult Palate | 25 | Biker Babes | 18 | Girls Doin Girls | 25 | Insatiable | 20 |
| All American Hooter Heaven | 25 | Cafe Flesh | 20 | Girls Games | 25 | Interactive Adventures of Seymore Butts | 38 |
| Amateur Models | 25 | College Girls | 25 | Girls Girls Girls | 20 | Interactive Adventures of Seymore Butts II | 45 |
| American Girls | 20 | Curse of the Cat Woman | 20 | Girls of Pleasure | 25 | Kelly Eighteen | 25 |
| American Girls 2 | 20 | Dirty Debutantes (InterActive) | 30 | Girls of Stephen Hicks | 20 | Maddam's Family | 30 |
| Amorous Asian Girls | 25 | Dream Machine | 38 | Hidden Obsession | 20 | Mask | 20 |
| Asian Palate | 26 | Exotic Poses | 20 | High Volume Nude | 20 | Nasty Nurses | 20 |
| AP. . . Called Wanda | 20 | Fao 2 | 20 | Hot Pics | 20 | New Wave Hookers | 20 |
| Art of Picking up Girls | 10 | | | House of Dreams | 20 | Night Trips | 20 |
| | | | | Interactive Adult Movie Almanac | 39 | Night Watch Interactive II | 35 |
| | | | | | | Nova Collection, vol. 1 or 2 | 25 |
| | | | | | | Orient XXX-Press | 20 |
| | | | | | | Pinch of Pepper | 30 |
| | | | | | | Scissors and Stones | 29 |
| | | | | | | Secrets | 20 |
| | | | | | | Sex | 25 |
| | | | | | | Sinful Girls | 20 |
| | | | | | | Sixty Nine | 25 |
| | | | | | | Squirt City | 20 |
| | | | | | | Strippoker | 25 |
| | | | | | | T&A 2 The Maxx | 20 |
| | | | | | | The Fisherman's Wife | 25 |
| | | | | | | Top Heavy | 20 |
| | | | | | | Topless Dancer | 15 |
| | | | | | | Urotsukidoji | 25 |
| | | | | | | Wet Dreams | 20 |
| | | | | | | Wicked Whispers | 15 |
| | | | | | | Winner Takes All | 35 |
| | | | | | | Women on Wheels | 20 |
| | | | | | | World's Best Breasts | 20 |

## PENTIUM PCI LOCAL BUS STANDARD SYSTEMS™

**PENTIUM 90 MHz** ..... $1,729
**PENTIUM 66 MHz** ..... $1,439
**PENTIUM 60 MHz** ..... $1,419

- Intel 64 Bit CPU w/Heatsink & Fan
- PENTIUM PCI Local Bus M.B. w/Zif
- 8MB RAM (exp to 128)
- 1.44 MB Floppy
- 540 MB Hard Drive
- PCI Enhanced IDE Controller w/2S/1P/1G Port
- PCI SVGA w/1MB Video Accelerator Card
- 15" SVGA N.I. Monitor, Energy Saving, 1280 x 1024 Digital, Flat Screen, Edge to Edge
- Mid Tower Digital w/235 Watts P.S.
- High Resolution Mouse
- 101 Enhanced Keyboard

5 YR. LABOR WARRANTY 1 YR. PARTS

## PENTIUM PCI LOCAL BUS PROFESSIONAL SYSTEMS™

**PENTIUM 90 MHz** ..... $2,349
**PENTIUM 66 MHz** ..... $1,989
**PENTIUM 60 MHz** ..... $1,969

- Intel 64 Bit CPU w/Heatsink & Fan
- Intel Motherboard "Neptune" for 90 MHz
- 256k Cache Memory
- 16MB RAM (exp to 128)
- 1.44 MB Floppy
- 1GB Hard Drive
- PCI Enhanced IDE Controller w/2S/1P/1G Port
- PCI ATIMach 64 w/2MB RAM SVGA Card or Diamond Stealth 64 w/2MG
- 15" SVGA N.I. Monitor, Energy Saving, 1280 x 1024 Digital, Flat & Full Screen,
- Mid Tower Digital w/235 Watts P.S.
- High Resolution Mouse
- 101 Enhanced Keyboard

5 YR. LABOR WARRANTY 1 YR. PARTS

## PENTIUM PCI SCSI STANDARD SYSTEMS™

**PENTIUM 90 MHz** ..... $1,799
**PENTIUM 66 MHz** ..... $1,449
**PENTIUM 60 MHz** ..... $1,429

- Intel 64 Bit CPU w/Heatsink & Fan
- PENTIUM PCI Local Bus M.B. w/Zif
- 256k Cache Memory
- 8MB RAM (exp to 128)
- 1.44 MB Floppy
- 540 SCSI Hard Drive
- PCI Enhanced SCSI Controller w/2S/1P/1G Port
- PCI SVGA w/1MB Video Accelerator Card
- 15" SVGA N.I. Monitor, Energy Saving, 1280 x 1024 Digital, Flat & Full Screen,
- Mid Tower Digital w/235 Watts P.S.
- High Resolution Mouse
- 101 Enhanced Keyboard

## VESA LOCAL BUS SYSTEMS™

**486DX2-66 *Intel Inside** ..... $899
**486DX2-50** ..... $849
**486DX-33** ..... $849

- PENTIUM Overdrive ready Motherboard
- 256k Cache
- Fan & Heatsink
- 4MB RAM
- 420 MB Hard Drive
- 1.44 Floppy
- 14" SVGA N.I. Monitor Energy Saving Full Screen
- VL Bus SVGA w/1Mg Video Accelerator Card
- VL Bus Super IDE Controller w/2S/1P/1G port
- 101 Enhanced Keyboard
- High Resolution mouse
- Mini Tower Digital Case w/ 2/235 Watts P.S.

5 YR. LABOR WARRANTY 1 YR. PARTS

## PENTIUM SCSI PROFESSIONAL SYSTEMS™

**PENTIUM 90 MHz** ..... $2,589
**PENTIUM 66 MHz** ..... $2,199
**PENTIUM 60 MHz** ..... $2,179

- Intel 64 Bit CPU w/Heatsink & Fan
- INTEL Motherboard "Neptune" for 90 MHz
- 16MB RAM (exp to 128)
- 1.44 MB Floppy
- 1GB SCSI Hard Drive
- PCI ADAPTEC 2940 SCSI Enhanced Controller
- PCI ATIMach 64 w/2MG SVGA Card or Diamond Stealth 64 w/2MG
- 15" N.I. Monitor, Energy Saving, 1280 x 1024 Digital Control, Flat & Full Screen,
- Mid Tower Digital w/235 Watts P.S.
- High Resolution Mouse
- 101 Enhanced Keyboard

5 YR. LABOR WARRANTY 1 YR. PARTS

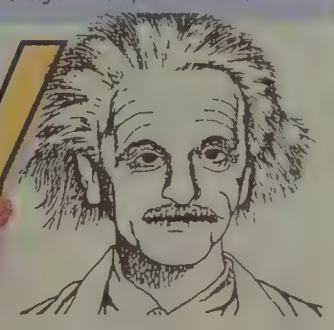
## SUPERQUICK 486™

**486DX4-100** ..... $1,139
**486DX2-80** ..... $1,039

- Pentium Overdrive Ready Motherboard
- 256K Cache
- Fan & Heatsink
- 8MB RAM
- 540MB hard Drive
- 1.44 Floppy
- 14" SVGA N.I. Monitor Energy Saving Full Screen
- VL Bus SVGA w/1MG Video Accelerator Card
- VL Bus Super IDE Controller w/2S/1P/1G port
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Digital Case w/235 Watts P.S.

CALL FOR LOWEST PRICE ON INTEL 486 PCI SYSTEM

# TECHNOLOGY Smart Choice



### Parts

| | |
|---|---|
| Midi Adapter | $18 |
| 115 Watts Amplified Shielded Speaker | 49 |
| Conner 420 Mg w/Tape Back Up | 169 |

### Video Cards

| | |
|---|---|
| Trident ISA w/1MG | $55 |
| Trident 9400 Windows Accelerator N.G. A. up to 2MG | 67 |
| Trident PCI w/1MG | 85 |
| Trident PCI w/2MG | 110 |
| Kelvin 64 VLB w/1MG up to 2MG | 125 |
| ATI Mach 32 VLB 1MB D | 99 |
| ATI Mach 32 VLB 2MB D | 155 |
| ATI Mach 64 PCI 2MB D | 179 |
| ATI Mach 64 PCI 2MB V | 259 |
| ATI Mach 64 PCI 4MB V | 459 |
| Diamond ISA Accelerator 1MG VGA | 90 |
| 64 Diamond Stealth VLB 1MG D | 135 |
| 64 Diamond Stealth VLB 2MG D | 175 |
| 64 Diamond Stealth VLB 2MG V | 269 |
| Diamond Stealth PCI 32 2MG D | 145 |
| Diamond Stealth PCI 64 2MG D | 169 |
| Diamond Stealth PCI 64 2MG V | 275 |
| Diamond Viper PCi 64 2MG V | 245 |

### Monitors

| | |
|---|---|
| Impression 14" N.I. 1024x768, 0.28mm, L.R. & Energy Saving, Edge-to-edge | $209 |
| MGC 15" N.I. 1280x1024, 0.28mm, L.R. & Energy Saving, Flat & Edge-to-edge | 285 |
| MAG 15" N.I. 1280x1024, 0.28mm, L.R. & Energy Saving | 310 |
| MAG 17" N.I. 1280x1024, L.R. & Energy Saving | 569 |

### Motherboards w/CPU

| | |
|---|---|
| 486DX2-66, 256K VESA Pent Ready Intel/AMD | $255/235 |
| 486DX2-80 AMD 256K VLB | 250 |
| 486DX4-100 Intel, 256K VESA Local Bus | 539 |
| 486DX40, AMD 256K VLB | 199 |
| Pentium 60 MHz, 256K Cache, PCI | 530 |
| Pentium 66 Mhz, 256K Cache, PCI | 550 |
| Pentium 90 Mhz, 256K Cache, PCI | 750 |

### Floppy Drives

| | |
|---|---|
| Teac 1.2MB (5-1/4") | $45 |
| Teac 1.44MB (3-1/2") | 35 |

**Corporate, University and Government P.O.'s are welcomed.**

### Hard Drives

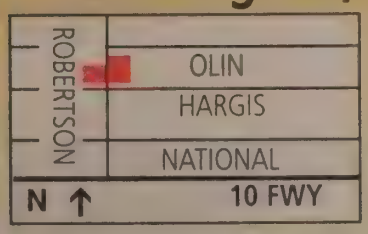
| | |
|---|---|
| Maxtor or Conner 420MB | $159 |
| Maxtor 540MB or Conner | 195/179 |
| 560MB IDE | 179 |
| Conner or MAXTOR 850MB | 239 |
| Conner 1.27 GB or Western Digital 1.08 IDE | 369 |
| Conner or Quantum/Micropolis 540MB SCSI | 209 |
| Conner or Quantum 1GB SCSI | 439 |
| Quantum 730MB IDE | 229 |
| Quantum 2.1GB SCSI | 820 |

### Memory

| | |
|---|---|
| 1 Meg x 30 Pins 70ns | $31" |
| 4 Meg x 30 Pins 70ns | 110 |
| 4 Meg x 72 Pin | 135 |
| 8 Meg x 72 Pin | 269 |
| 16 Meg x 72 Pin 70ns | 415 |

## Tel: (310) 836-4441
## Fax: (310) 836-6060

**2812 1/2 S. Robertson Blvd., Los Angeles, CA 90034**

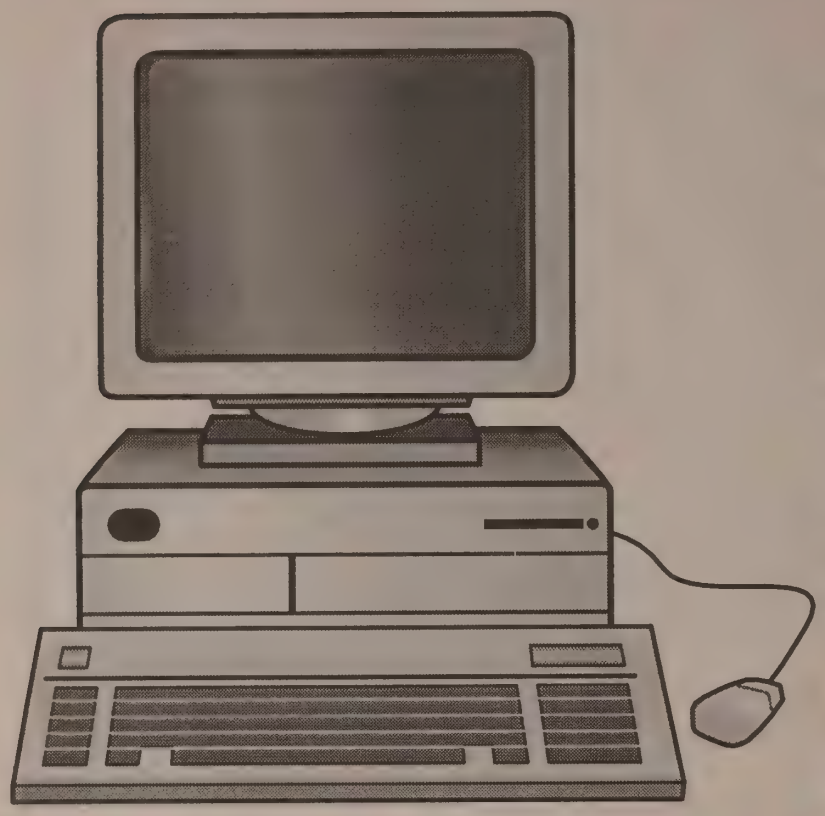


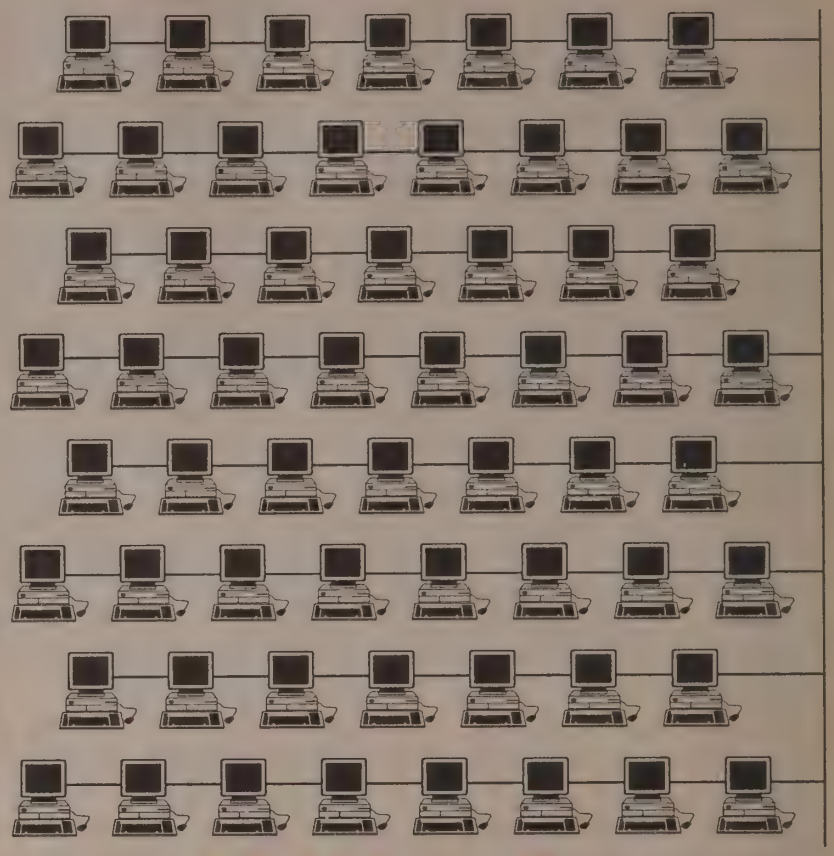

NOW HIRING SALES & TECHNICIANS

**HOURS:**
M-F 10AM-6PM
Sat. 10AM-6PM
Sun. CLOSED

Terms and conditions: All of the above prices reflect 3% CASH or CHECK discount. Customers who pay CASH receive an additional 3% discount. Does not apply to resellers. Defective merchandise is exchangeable for the same item only. Not responsible for any typographical errors

# One Computer or One Hundred...





# We Keep You Working

## ATS

| Internet Access Solutions | Network Consultation | Remote LAN Access | Branch Office Internetworking | Support, Installation, & Service |
|---|---|---|---|---|

ATS has the experience *and* the expertise to handle your network requirements.

Whether you're running one small office with one micro computer, or a statewide network of offices with a complex inventory of computers. You simply cannot afford "down time."

Call **ATS** today to find out just how easy it is to stay productive with current solutions.

ATS **1-800-969-4287 (4ATS)**

ATS Sales/Service Centers:
Los Angeles (310) 839-0020
Oakland (510) 638-4449

## TOOLS FOR CREATING BELIEVABLE ANIMATION *continued from page 194*

again, first a hierarchy is established: The fingers are connected to the hand, the hand is connected to the wrist, the wrist to the lower arm, etc., up to the shoulder.

Next, joint constraints are defined. By moving the last link in the chain, the finger, smooth motion is achieved, and the whole arm will follow and move in a fluid, natural way. 3D Studio can automatically figure out the most efficient way to create the IK animation for you, or you can interactively manipulate the animation and decide what looks best.

Several examples of inverse kinematics come with Release 4 to help the animator study various types of motion. These include a figure climbing a ladder and a realistically moving crankshaft. Inverse kinematics is a term once familiar only to programmers and mathematicians. This is a sophisticated feature for the serious animator.

### THE KEYSCRIPTING LANGUAGE PLUG-IN

Another area in physical-based modeling where constraints are used in computer graphics is in collision detection. Collision detection can be thought of as the ability of objects to detect other objects and react as they should when they "collide" or meet in 3-D space.

A ball that is dropped in the real world falls, hits the floor, and bounces back up. That seems obvious. But in the virtual world of the computer there is no velocity or gravity or mass and no solidness to make the floor hard. If you don't tell the computer that these properties are important, the ball, when dropped, could fall right through the floor. The ball must somehow be told what the rules are in order to "detect that it has collided" with the floor.

With the new Keyscript language, you can write a few lines of code, and embed that code into the ball to control the ball's behavior, thus telling it to bounce when it collides with the floor. This code can easily be reused or transferred to other objects.

Keyscript is a BASIC-like interpreted language. Because it has user-definable data structures and arrays, it has the full power of a language such as C or Pascal and is not just a scripting language. It also allows for file input and output and supports creating user interface dialog boxes. Because this language was added as a modular plug-in, 3D Studio's "main" code was left intact, and therefore more robust.

One keyscript included with Release 4 demonstrates collision detection by showing the chain reaction that happens to a group of pool balls when hit by a cue ball. Other sample scripts demonstrate elementary physics, path motion controls for acceleration and deceleration, various camera and object controls, and morph management, which is helpful for lip-synching in character animation.

### Key New Features In Release 4

- Inverse Kinematics
- Fast Preview
- Keyscript Language
- Camera Control and Match Perspective
- Quick Preview
- EPS Output
- 100 times speedup of many functions in 3D Editor
- Null Display mode for running 3D Studio under Windows as background process with all display cards
- Switch to set Keyframer to visualize each field of an animation
- New installation options
- Many IPAS enhancements


8 Years in PC Business !!!

Sale!!!

@ Free Mouse/Pad
@ 5 years labor and 1 year parts warranty!!!
@ System delivery within a 25 mile radius!!!!
@ Ask about our available leasing programs.

**SUPER PENTIUM SYSTEM**

* PENTIUM PCI Motherboard w/INTEL CPU
* CPU Cooling Fan w/Hintsink
* 16MB 72 Pin RAM (Exp. to 128MB)
* 1.44MB FDD
* PCI Enhanced IDE AT I/O
* ATI MACH 64 w/1MB (Exp. to 2MB)
* MGC 15" NI .28 Power Saving Color Monitor
* Built-in Math Co-processor
* 256k Cache
* MID Tower Digital Case w/230w
* 540MB IDE HDD
* 14.4/14.4 VOICE FAX MODEM
* Acekey Membrane Enhanced Keyboard

PENTIUM-60..... $1769
PENTIUM-90..... $1999
Upgrade to 17" MGC .26 ..... Plus $309

**FAMILY MULTIMEDIA SYSTEM**

* 486DX4 Green (Power Saving) Motherboard
* 256k Cache
* Mid-Tower Digital Casew /230W.
* 1.44MB FDD
* 32-Bit VLB IDE IO w/2S-1P-1G (Bi-directional Printer Port)
* Double Speed CD-ROM
* 16-bit Sound Card
* 12 CD Titles (include Encyclopedia, Animals, & Games)
* CPU Cooling Fan w/Heatsink
* 4MB 72-pin RAM (Exp. to 128MB)
* 420MB IDE HDD
* 32-Bit VLB SVGA Card w/1M
* Acekey Membrane Enhanced Keyboard
* 14" SVGA .28 Color Monitor
* Pair of Stereo Speakers

Intel VLB486DX4-100 .....$1189
Intel VLB486DX2-66 .....$1089
Intel VLB486DX-33 .....$1029

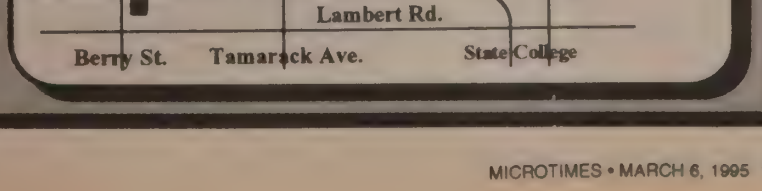
**4xSPEED MULTIMEDIA SYSTEM**

* 486DX4 Green (Power Saving) Motherboard
* 256k Cache
* Mid-Tower Digital Casew /230W.
* 1.44MB FDD
* 32-Bit VLB IDE IO w/2S-1P-1G (Bi-directional Printer Port)
* Quad Speed CD-ROM (Mitsumi)
* 16-bit Sound Card
* Microsoft Home Titles Package ($125 retail value)- Includes: Encarta 95 Encyclopedia, Golf, Works & Money, Dangerous Creatures & 12 Entertainment Games
* CPU Cooling Fan w/Heatsink
* 4MB 72-pin RAM (Exp. to 128MB)
* 420MB IDE HDD
* 32-Bit VLB SVGA Card w/1M
* Acekey Membrane Enhanced Keyboard
* 14" SVGA .28 Color Monitor
* 80 Watt JAZZ Stereo Speakers

Intel VLB486DX2-66.....$1229
Upgrade to 15" MGC ..... Plus $119

* Prices & availability are subject to change without notice.
* Prices shown are based on 3% cash discount.
* We honor corporate, school, & government accounts.
* All brand new parts.

AMERICAN TECH ENHANCE COMPUTER CORP.
590 W. CENTRAL AVE., BREA, CA 92621
Tel: (714) 990-3933 Fax: (714) 990-3653
Hours: Monday-Friday 9:00-6:00 & Sat. 11:00-4:00



## TOOLS FOR CREATING BELIEVABLE ANIMATION *continued...*

### PRODUCTIVITY TOOLS

The Fast Preview renderer, Camera Control, and the Match Perspective tool, all make it easier to line up newly made geometric models with an existing still image, such as a background. For example, an architect can show a client a very realistic visualization of a proposed site, complete with a rendered building (the model) in place.

Fast Preview allows you to create immediate previews (in wireframe, flat, or Gouraud shading) while you work. Previously, you had to wait for the scene to fully render, only to have to wait and render it again if you wanted to make changes.

Using Camera Control, target positions, cameras, and fields of view can all be adjusted interactively, in an already rendered viewport. You can quickly test different options and angles to find the best shot or camera angle.

### FILE FORMATS

The Encapsulated PostScript (EPS) plug-in allows for saving EPS files for printing or use in desktop publishing applications. A TIFF file can be included within an EPS file for programs that have thumbnail file viewers. Settings can be customized for size, resolution, and other specifications and are set in a dialog box and saved automatically.

New file formats added in Release 4 include k3d script file for Keyscript, 3de Dialog box file for Keyscript, and DAT Configuration files created by plug-ins.

While Release 3 focused primarily on rendering and image quality, Release 4's main improvement is added realism in motion. One last area that needs to be addressed for 3D Studio to fully achieve modeling realism is the need for a patch modeler. (3D Studio currently uses polygonal modeling, which is not as good for creating organic shapes.) While it is disappointing that due to beta-testers' concerns, the patch modeler originally planned for this release was not added, it is to Autodesk's credit that they have chosen not to release it prematurely.

So, without the patch modeler is this upgrade worth it? Yes. Release 4 accomplishes several things: It enables the creation of richer, more life-like animation with its physical modeling toolset. Its quick preview windows help save rendering time—often a big production bottleneck. It also puts more power into the hands of the animator through code customizability via the Keyscripting language.

There are many other new features not listed here—all of which increase modeling realism, save time, or somehow increase productivity. Release 4 represents a new level of refinement and useability for the animator in the 3D Studio workspace. ■

*Copyright © 1995 by Pamela Mason. All rights reserved.*

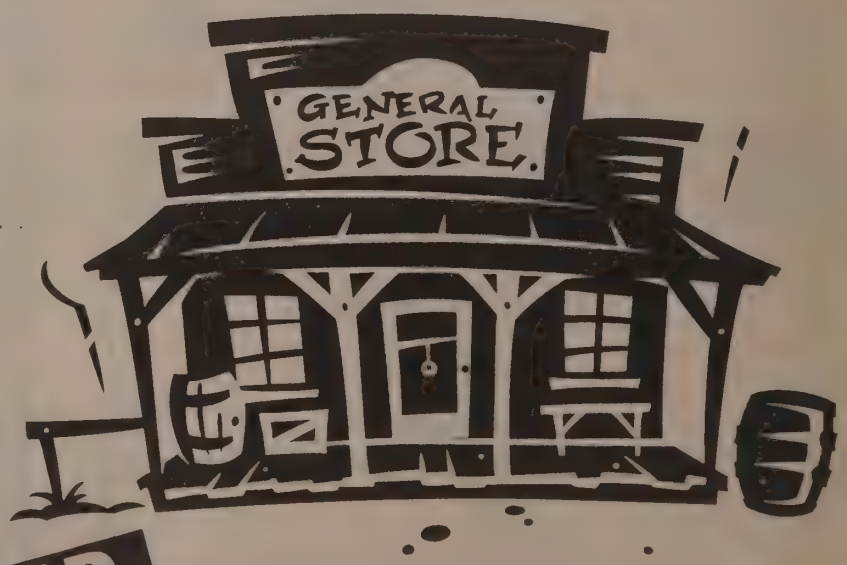
### RESOURCES:

**3D Studio Release 4, $2995**
**Upgrade From Rel. 3, $295**
**Upgrade From Rel. 2, $695**
**Upgrade From Rel. 1, $795**
Autodesk, Inc.
1-800-879-4233

**Schreiber Puppeteer**
4800 Happy Canyon Rd.,
Ste. 250
Denver, CO 80237-1074
1-800-252-1024


# HOW MUCH RAM DO I NEED?

Seems like today everybody is getting into the business of selling computer upgrades. But how do you know where to go for the best prices and the best deals? Let's face it, you need help. Better read MICROTIMES. MICROTIMES is your general store for computer information.




READ MICROTIMES™

# HARDWARE SOFTWARE

THE ULTIMATE CHOICE

## MATRIXSYS

7411 Garden Grove Blvd., Suite C (Beach & Goldenwest)

### VESA LOCAL-BUS 486's SYSTEM:

Intel CPU • 256K Cache • 4MB RAM • 1.44MB FDD • 420MB HD • Mouse
32Bit Contrl & VGA Card • 101 Enh. K/B • SVGA (.28 NI) • Mini-Tower Case

***486DX-33 / $999.00 • 486DX-66 / $959.00***
***486DX2-80 / $979.00***

### MULTI-MEDIA SYSTEM SPECIAL:

486DX'S M/B • 256K Cache • 4MB RAM • 1.44MB FDD
540MB HD •VLB I/O & GRAPHIC CARD w/1MB • 101 Enh. K/B
SVGA 14" Monitor (.28 NI) • Mid-Tower • CD-ROM (D/S) • Mouse
MS Encarta • MS Works • MS Money • MS Golf • and more...

***486DX-66 / $1,259.00 • 486DX-80 / $1279.00***

### HARDWARE & PERIPHERALS

**Multi-Media Pack**
**16Bit Sound Card • CD-ROM D/S • Speaker • 14 CD-Titles**
**SPECIAL $230**

| | | | |
|---|---|---|---|
| 486 VLB w/256K w/o CPU | $105 | VLB Enh. IDE Contrl. | $19 |
| 14.4K Int. FAX/MODEM | 59 | VLB SVGA Card w/1MB | 69 |
| 14.4K Int. F/M w/Voice | 69 | PCI SVGA w/1MB | 95 |
| SoundBlaster CD 16 (OEM) | 85 | PCI Enh. IDE Contrl. | 28 |
| Sony CD-ROM D/Spin | 110 | Diamond Stealth 64 VLB w/2MB | 185 |
| 420MB Hard Drive | 179 | 14" SVGA Shamrock Monitor (.28) | 209 |
| 540MB hard Drive | 199 | 14" SVGA Proton Monitor (.28) | 215 |
| 1.44MB Floppy Drive | 35 | 15" SVGA Shamrock Monitor (.28) | 305 |
| 1.2MB Floppy Drive | 45 | 15" SVGA Viewsonic Monitor | 399 |
| 486 PCI (Intel Chip) | 159 | 17" SVGA Shamrock Monitor | 559 |
| PENTIUM 90 M/B w/o CPU | 195 | 17" SVGA Acer Monitor / ADI | 595 |
| | | 17" SVGA Viewsonic 17 | 825 |

### NOTEBOOK

4MB - 9.5" Dual-Scan Color - 1.44MB - Build-in Mic. & Speaker
Type II & III PCMCIA - Trackball - VLB Video - 340MB HD
Carrying Case & Adaptor - ISO-9002 Certified

**486DX-33 / $1760 • 486DX-66 / $1850**
**486DX4 / CALL • PENTIUM / CALL**

Please Call Us for Free Estimate

**(714) 895-3663**

MATRIXSYS COMPUTER
**7411 Garden Grove, Suite C • Garden Grove, CA**

OFFICE HOURS: MON-FRIDAY, 9:30AM - 6:00PM
SATURDAY, 11:00AM - 4:00PM

We accept VISA & MASTERCARD

Prices subject to change without notice. All prices quoted base on cash prices only

*Lowest Prices Anywhere!*

## C&G COMPUTER SOFTWARE OUTLET

7441 Garden Grove Blvd, K, Garden Grove, CA 92641

## OVER 1000 ITEMS IN STOCK

**Quicken 95-Win**
CD List $69.95
SALE $24.99

**RISE Of The Robots**
CD List $79.95
SALE $29.99

**Comptons Encyclopedia 95**
CD List $149.50
SALE $29.99

**QEMM 7.0**
List $99.95
SALE $19.99

CD'S from $4.99
Games from $4.99
Education from $4.99
Adult CD'Sfrom $4.99
Shareware from $1.00

NEW SHIPMENT
"Over 50 Titles To Choose From"
$4.99
or
3 for $10.00

## IBM & MAC

Desktop Publisher's
3-CD Accessory Pack!
Over 5000 clip art images
and 200 true type fonts
$149.95 VALUE
ONLY $19.99

**GAME PACK**
SOLITAIRE - POKER - BRIDGE - CRIBBAGE
List $79.95 SALE $19.99

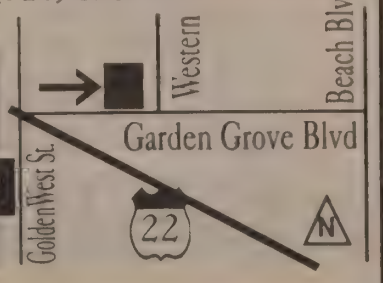
**Visit Our Store & Take An Extra**
**10% OFF With This Add!**

C&G COMPUTER SOFTWARE OUTLET
TEL: (714) 890-1581
FAX: (714) 890-1891

VISA MasterCard

STORE HOURS
Tues-Fri 10:00 AM-6:00 PM
Sat 10:00 AM-4:00 PM

WE ALSO MAIL ORDER
WE BUY SOFTWARE

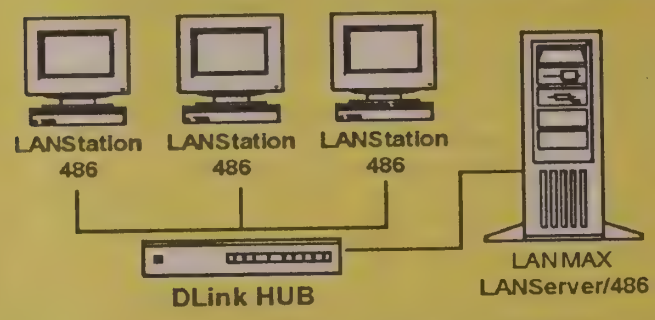


# Wouldn't it be great if Networking was as simple as plugging in a phone...

## USM Introduces LANMax Network-ready Systems

*LanMax Network-ready Systems are a unique solution to the Networking Problem. LanMax Networks are shipped Ready-to-Run, simply plug in the provided cables and you're ready to get to work! LanMax Systems are pre-tested, ensuring that every component is working and compatible. With the LanMax Modular Design, your Network can be easily upgraded and expanded as your business grows. USM is your LanMax Authorized Distributor, call USM today for all of your Networking needs.*

## Basic 3-Station Complete Network




**3 - LANStation/486DX-33 including:**
- 4MB RAM
- Slimline Case
- TEAC 1.44 Floppy Drive
- Network Boot Diskette
- D'Link Ethernet Network Card
- 14" Super-VGA Color Monitor
- 2 Serial, 1 Parallel port
- 25' Ready-to-Plug Network Cable

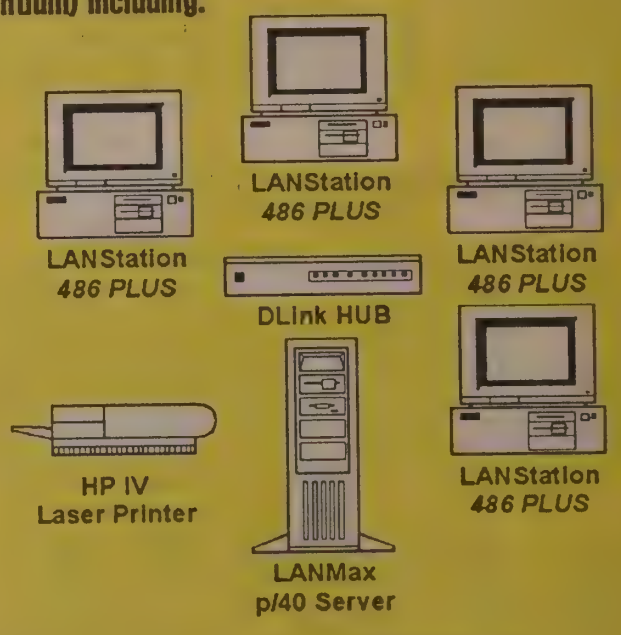
**1 - LANServer/486DX2-66 including:**
- 8MB RAM
- Buffered Controller (VLB)
- Full Tower Case
- TEAC 1.44 Floppy Drive
- 540MB Hard Disk Drive
- D'Link Mini HUB
- ULTRA Server Operating System
- 5 Station Network License

**$6995**

## Advanced 4-Station Complete Network

**4 - LANStation/486DX2-66 Plus including:**
- 4MB RAM
- Desktop Case
- Local Bus Controller card
- TEAC 1.44 Floppy Drive
- 420MB Hard Disk Drive
- D'Link Ethernet Network Card
- 14" Super-VGA Color Monitor
- 2 Serial, 1 Parallel port
- 25' Ready-to-Plug Network Cable
- 5 Station Network License

**1 - LANServer p/40 (90MHz Pentium) including:**
- 16MB RAM
- Fast Caching Controller with 4MB
- Full Tower Case
- TEAC 1.2 and 1.44 Floppy Drives
- 850MB Hard Disk Drive
- D'Link 12-port Stackable HUB
- ULTRA Server Operating System
- 14.4 Baud Modem
- 350MB Tape Backup
- 14" Super VGA Color Monitor



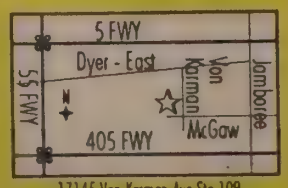

**1 - Hewlett Packard LaserJet 4 Printer**

**$13995**

**Network Operating System Pre-Installed and Tested.**
**All Cables, Connectors, Documentation, Etc. included!**
**On-Site Installation and Service Contracts are available.**

USM
USMACH

**USM Irvine**
**Your LANMax Authorized Distributor**



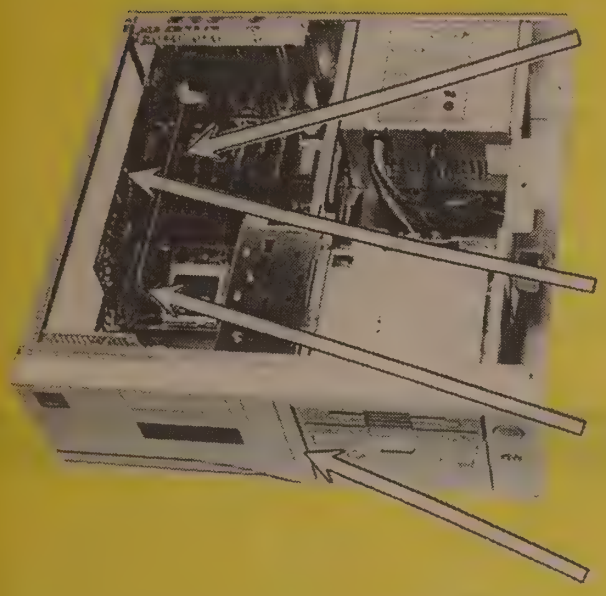

17145 Von Karman Ave Ste 109
**(714) 252-8335**
FAX (714) 252-8354
Hours M-F 9-6 Sat. 10-3

**Other Locations to serve you!**
USM Sunnyvale - (408) 738-8291
USM Fremont - (510) 623-9040
USM San Francisco - (415) 952-5885

**Since 1983**

# The USM Way...
# High Quality, Superior Service and Low Prices!

## USMach 486 Computers Stand Above The Rest
### (Just a few of the many reasons why...)



| USMach 486 | "The Rest" |
|---|---|
| **American 486 Mainboard with 2 year warranty**<br>8 slots - 3 VESA Local Bus, 5 ISA slots<br>5-year Lithium CMOS Battery<br>2 Bus Mastering slots for faster performance<br>SIS Chipset - the fastest VESA chipset<br>AMI WinBIOS - The World Leader<br>Supports large IDE drives (540MB+)<br>Energy Star Compliant, Anti-virus boot protection<br>Landmark 2.0 - 223 | **No-name 486 Mainboard with 1 year warranty**<br>7 slots - 3 VESA Local Bus, 3 ISA slots, 1 8-bit<br>1-2 year NiCad CMOS Battery<br>No Bus Mastering slots<br>OPTi, Hint, FOREX Chipset - slower performance<br>Award, Mr. BIOS - no track record<br>Supports only up to 540MB hard drives<br>Not Energy Star Compliant without Virus protection<br>Landmark 2.0 - approx. 200 |
| **Eagleview 1MB Graphics Adapter - Made in USA**<br>C&T Chipset with 128K (256K max) Video Cache<br>Video Caching is the latest Graphics Breakthrough<br>Twice as fast as Generic cards!! (Landmark - 13.2)<br>2 year warranty | **Generic 1MB Graphics Adapter - Made in Taiwan**<br>Trident Chipset - mediocre performance<br>Does not support Video Caching<br>Reasonable Windows performance (Landmark - 6.5)<br>1 year warranty |
| **Eagleport Enhanced IDE Controller - Made in USA**<br>Supports 1.2, 1.44 and 2.88MB Floppies<br>Up to 21X faster than generic cards!! (Coretest - 261)<br>Fast 16550 Serial Ports, Enhanced Parallel Port<br>2 year warranty | **Generic Standard IDE Controller - Made in Taiwan**<br>Supports 1.2, 1.44 Floppies only<br>Average Access Rate and Throughput (Coretest - 12)<br>Standard Serial Ports, Standard Parallel Port<br>1 year warranty |
| **Majesty Desktop Case with 7 Drive Bays**<br>1.2 Guage Triple Zinc plated Steel<br>250Watt UL Approved Power Supply | **Generic Desktop case with 5-6 drive bays**<br>1.0 or less Guage Single Zinc plated Steel<br>200-230Watt Non UL Approved Power Supply |

## USMach 486DX2-66 Complete System* Only $1145!

*Mach V 486DX2-66 VESA Local Bus with 256K Cache, 4MB 70ns RAM (64 MB Maximum), Desktop Case, Full Size 101 Keyboard, 420MB Hard Drive, 1.44MB Floppy drive, Eagleport controller, Eagleview Video card, 14" SVGA .28mm Non Interlaced monitor

**Custom Configurations and Expert Installation available. Call today, or come by our convenient Irvine Showroom to experience the USM difference!**

## USMach Pentium 90 Only $1945*

*Intel Pentium CPU, PCI Mainboard with 256K Cache, 8MB 70ns RAM (128MB Maximum), Mini tower Case, Full Size 101 Keyboard, 540MB Hard Drive, 1.44MB Floppy drive, Enhanced IDE Controller (4 HDD), 1MB PCI Video card, 14" SVGA .28mm Non Interlaced monitor

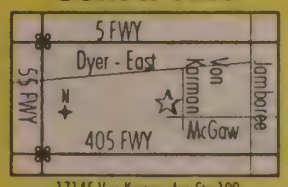
## USMach Pentium 66 Only $1745*

USM
USMACH

Visa and Mastercard accepted. No surcharge for credit cards.
Price and availability subject to change without notice.
Prices effective through 4/2/95.

**Corporate and Government POs are welcome! 90-days Same as Cash Financing is also available! (OAC)**

**USM Irvine**




17145 Von Karman Ave Ste 109
**(714) 252-8335**
FAX: (714) 252-8354
Hours: M-F 9-6 Sat. 10-3

**Other Locations to serve you!**
USM Sunnyvale - (408) 738-8291
USM Fremont - (510) 623-9040
USM San Francisco - (415) 952-5885

**Since 1983**

# NEW GENERATIO

## QUAD SPEED CD-ROM & DI

Optional

General Electric
4 Year On-Site Service

ENHANCED IDE

intel inside
pentium PROCESSOR

ATi TECHNOLOGIES INC.

### VL-Bus Plus

* Intel Pentium OverDrive Ready
* 4MB 70ns RAM
* 256K Fast Cache
* 3.5" 1.44MB Floppy Drive
* 540MB 11ms IDE Hard Drive
* 32Bit VL-Bus IDE HD/FD Controller
* 32Bit VL-Bus Graphics Accelerator w/1MB
* 14" 1024x768 .28 NI SVGA Monitor
* 2 Serial, 1 Parallel, 1 Game Port
* 101 Enhanced Keyboard
* Hi-Resolution Mouse
* Mini Tower Case, 5 Drive Bays
* MS-DOS 6.22 & Windows 3.11 w/Manual

**486DX4-100 $1099**
**486DX2-66 $ 999**

### VL-Bus Media Plus

* Intel Pentium OverDrive Ready
* 4MB 70ns RAM, 256K Cache
* 3.5" 1.44MB Floppy Drive
* 540MB 11ms IDE Hard Drive
* 32Bit VL-Bus IDE HD/FD Controller
* 32Bit VL-Bus Graphics Accelerator w/1MB
* 14" 1280x768 .28 NI SVGA Monitor
* Double-Speed (2X) CD-ROM Drive
* Sound Blaster 16-Bit Compatible Card
* 15W Hi-Fi Stereo Speakers
* 2 Serial, 1 Parallel, 1 Game Port
* 101 Keyboard & Hi-Res Mouse
* Mini-Tower Case, 5 Drive Bays
* MS-DOS 6.22 & Windows 3.11 w/Manual
* MS-Encarta '95, MS-Works V3.0
* MS-Money V3.0, Dangerous Creature
* MS-Golf, Entertainment Pack(8 Games)

**486DX4-100 $1299**
**486DX2-66 $1199**

### VL-Bus Media Pro

* Intel Pentium OverDrive Ready
* 8MB 70ns RAM, 256K Cache
* 3.5" 1.44MB Floppy Drive
* 540MB 11ms IDE Hard Drive
* 32Bit VL-Bus IDE HD/FD Controller
* 32Bit VL-Bus Graphics Accelerator w/1MB
* 15" 1280x1024 .28 NI SVGA Monitor
* Double-Speed (2X) CD-ROM Drive
* Sound Blaster 16-Bit Compatible Card
* 115W Hi-Fi Stereo Speakers
* 2 Serial, 1 Parallel, 1 Game Port
* 101 Keyboard & Hi-Res Mouse
* Mid Tower Case, 8 Drive Bays
* MS-DOS 6.22 & Windows 3.11 w/Manual
* MS-Encarta '95, MS-Works V3.0
* MS-Money V3.0, Dangerous Creature
* MS-Golf, Entertainment Pack (8 Games)

**486DX4-100 $1599**
**486DX2-66 $1499**

### PCI Media Pro

* 8MB 70ns RAM, 256K Cache
* 3.5" 1.44MB Floppy Drive
* 540MB 11ms Enhanced IDE Hard Drive
* PCI Enhanced IDE HD Controller
* PCI ATI Mach64 Accelerator w/1MB
* 15" 1280x1024 .28 NI SVGA Monitor
* Double-Speed (2X) CD-ROM Drive
* Sound Blaster 16-Bit Compatible Card
* 115W Hi-Fi Stereo Speakers
* 2 Serial, 1 Parallel, 1 Game Port
* 101 Enhanced Keyboard
* Hi-Resolution Mouse
* Mid Tower Case, 8 Drive Bays
* MS-DOS 6.22 & Windows 3.11 w/Manual
* MS-Encarta '95, MS-Works V3.0
* MS-Money V3.0, Dangerous Creature
* MS-Golf, Entertainment Pack (8 Games)

**Pentium-100 $2199**
**Pentium-90 $2099**
**Pentium-75 $1849**

### THE DYNASYS ASSURANCE

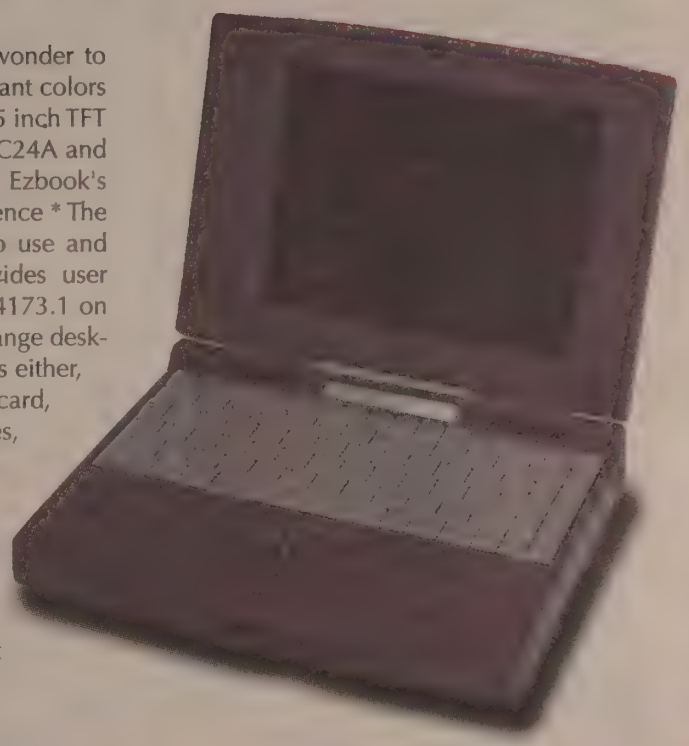
- 30-Day Money Guarantee.
- 3 Year (System)Labor Warranty.
- 1 Year Parts & Labor Warranty.
- 4 Year GE On-Site Warranty Optioal.

# N MULTIMEDIA

## TAL SOUND QUALITY

With all this performance and power found in our systems we had to find software to work with it. So we decided to bring the most popular CD titles found on the market. Microsoft Encarta '95, the best encyclopedia for CD ROM is the main feature in this new and exciting CD bundle put together by Microsoft.. Other titles are not to be forgotten as they are best sellers as well. The Bundle also includes Microsoft Works, one of the most utilized word processor, spreadsheet and database programs. Experience numerous full motion videos about various creatures in the new CD title, Microsoft Dangerous Creatures. What's a computer without a program to play golf in your office or home. Great graphics and attention to detail make Microsoft Golf an excellent game to have. Plus additional Window games are included to challenge your mind. Simply put, this new addition is the perfect compliment to a high performance machine.

The new CTX Ezbook notebook is a wonder to behold and run *. The display has vibrant colors and looks alive even at 60 off center. A 9.5 inch TFT panel is driven by the Western Digital 90C24A and considered to be among the best. CTX Ezbook's LCD panel gets two thumbs up for excellence * The icing doesn't stop here. With an easy to use and comfortable keyboard the Ezbook provides user friendliness and performance. Scoring a 4173.1 on the PC bench 9.0 test, besting many midrange desktop systems. It doesn't leave out the basics either, every notebook includes a 16 bit stereo card, speaker, microphone, long-life batteries, Windows 3.11, MS Dos, stylish carrying case, full function keyboard, 1Mb video card, 2 PCMCIA slots, built-in floppy drives and upgradability for memory, disk, screens, CPU power. Don't be fooled by its low premium price as it now stands among the current crop of top quality notebooks
*Computer Shopper PC Review 2/95



### PCI Media Ultra

* 8MB 70ns RAM, 256K Cache
* 3.5" 1.44MB Floppy Drive
* 850MB 10ms Enhanced IDE Hard Drive
* PCI Enhanced IDE HD Controller
* PCI ATI Mach64 Accelerator w/1MB
* 15" 1280x1024 .28 NI SVGA Monitor
* Quad-Speed (4X) 195ms CD-ROM
* Sound Blaster 16-Bit Compatible Card
* 115W Hi-Fi Stereo Speakers
* 2 Serial, 1 Parallel, 1 Game Port
* 101 Keyboard & Hi-Res Mouse
* Mid Tower Case, 8 Drive Bays
* MS-DOS 6.22, Windows 3.11 w/Manual
* MS-Encarta '95, MS-Works V3.0
* MS-Money V3.0, Dangerous Creature
* MS-Golf, Entertainment Pack (8 Games)

**Pentium-100 $2349**
**Pentium-90 $2249**
**Pentium-75 $1999**

### PCI Media Ultima

* 16MB 70ns RAM, 256K Cache
* 3.5" 1.44MB Floppy Drive
* 850MB 10ms Enhanced IDE Hard Drive
* PCI Enhanced IDE HD Controller
* PCI ATI Mach64 Accelerator w/2MB
* 17" CTX 1765GM .27 NI 1280x1024
* Quad-Speed (4X) 195ms CD-ROM
* Sound Blaster Multi CD 16 Sound Card
* 115W Hi-Fi Stereo Speakers
* 2 Serial, 1 Parallel, 1 Game Port
* 101 Enhanced Keyboard
* MicroSoft Mouse V2.0
* Full Tower Case, 10 Drive Bays
* MS-DOS 6.22, Windows 3.11 w/Manual
* MS-Encarta '95, MS-Works V3.0
* MS-Money V3.0, Dangerous Creature
* MS-Golf, Entertainment Pack (8 Games)

**Pentium-100 $3099**
**Pentium-90 $2999**
**Pentium-75 $2749**

### PCI PowerStation

* 16MB 70ns RAM, 256K Fast Cache
* 3.5" 1.44MB Floppy Drive
* 1.05GB 9ms Fast & Wide SCSI Hard Drive
* PCI Adaptec 2940W Wide SCSI Controller Up to 200% Faster than SCSI-2
* PCI ATI Mach64 Accelerator w/2MB World's Fastest Video, 100+ Winmarks
* 17" CTX 1765GM .27 NI 1280x1024
* Quad-Speed (4X) 195ms CD-ROM
* Sound Blaster Multi CD 16 Sound Card
* 115W Hi-Fi Stereo Speakers
* 2 Serial, 1 Parallel, 1 Game Port
* 101 Enhanced Keyboard
* Microsoft Mouse V2.0
* Full Tower Case, 10 Drive Bays
* MS-DOS 6.22 & Windows 3.11 w/Manual
* MS-Encarta '95, MS-Works V3.0
* MS-Money V3.0, Dangerous Creature
* MS-Golf, Entertainment Pack (8 Games)

**Pentium-100 $3599**
**Pentium-90 $3499**
**Pentium-75 $3249**

### CTX EzBook

* 8MB RAM
* 3.5" 1.44MB Floppy
* 340MB IDE Hard Drive
* VL-Bus Graphics w/1MB
* 9.5" Dual Scan Screen
* 16-Bit Stereo Sound & Mic
* Serial, Parallel Port
* 2 PCMCIA Slots (Type II & III)
* 84-Key Keyboard
* 19mm Trackball
* True 3.3-Volt Low Voltage Design
* Docking Station & CD-ROM Support
* 5.9 Pounds including Battery
* Carrying Case; 9.9" x 7.5" x 1.4"

| | |
|---|---|
| **Upgrade to 16MB** | **$395** |
| **Upgrade to 540MB HD** | **$149** |
| **PCMCIA 14.4 Fax Modem** | **$139** |
| **Additional Battery** | **$ 99** |

| | Mono | Dual Scan | Active Matrix |
|---|---|---|---|
| 486SX-33 | 1499 | 1899 | 2949 |
| 486DX2-66 | 1599 | 1999 | 2999 |
| 486DX4-75 | 1799 | 2199 | 3199 |
| 486DX4-100 | 1899 | 2299 | 3299 |

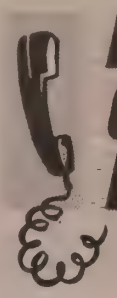
**Industry**
15352 East Valley Blvd.
City of Industry, CA 91746
Tel: **(818)336-4613**
Fax: **(818)330-1592**
M-F 9:00am - 6:00pm
Sat 10:00am - 5:00pm

**Pasadena**
1765 East Colorado Blvd.
Pasadena, CA 91106
Tel: **(818)583-1988**
Fax: **(818)583-8869**
Mon - Fri 9:00am - 6:00pm
Sat & Sun 10:00am - 6:00pm

**DYNASYS**
**Micro Development**

VISA DISCOVER COD
**For Your Protection we thoroughly investigate all Credit Cards!**

* All Prices reflect 3% Cash Discount *Prices & Specifications are subject to change without notice
* Government, School & Corporate PO's are welcome



# MicroTimes Quotation Hotline

## Bringing Buyers and Sellers Together

Beginning with the April 1, 1995 issue, MicroTimes will offer our advertisers a new way to reach California's active computer-buying audience.

## Take advantage of this business-building opportunity.

Using any e-mail provider (Internet, Compuserve, America Online, Etc.) and a specially designed quotation request form, advertisers will be able to provide MicroTimes readers—*your potential customers*—with specific pricing quotation.

## It's easy!

Here's how it works:

1. **Get online.** Not online? Act fast and we'll supply you with a coupon for free AOL software and 10 free hours of online time.

2. **Call** your MicroTimes Account Executive with your screen name or e-mail address by March 20.

3. **Nightly**, Monday-Friday, MicroTimes will turn readers' requests for pricing quotations into text files and send a file to advertisers' e-mail address with all quotation requests for that day.

4. **Access** these requests for quotation, download the e-mail file to your hard drive and print out that day's requests.

## It's that easy!

For more information on how you can reap the profits by being part of this valuable service, call today:

**(213) 851-8600**
**(714) 939-2809**


# Product Spotlight

*continued from page 170*

Doubler technology which, for example, can create an 8MB RAM disk from 4MB of memory. They have also added more options for setting up a RAM disk than most people are even aware exist.

A RAM disk created with Maxima is nonvolatile; as long as you leave the power on, crashes and restarts won't affect the data. If you've created a boot disk from your RAM disk, your Mac will boot from it, even on cold starts. There are options to have your RAM disk saved back to the hard drive periodically, as soon as any change occurs, on demand, and at restarts or shutdowns.

A new installer includes an EasySetup option that makes the creation of a boot RAM disk automatic. You can also use it to select the applications you want to load. Maxima will work on any Mac with a 68030, 68040, or PowerPC. It will work with System 6.0.5 and above, and works best on machines with at least 8MB of RAM.

I use it to create a RAM disk on which I store my Now Contact database. This dramatically speeds up searches. The same method can be used with any database files, or other files requiring speedy access. Powerbook users can create bootable RAM disks to preserve battery power by letting their hard drive spin down. Programmers can compile from a RAM disk without having to reload each time their application crashes. This is a very cool product, and it's highly recommended. (Connectix, Inc., 2600 Campus Dr., San Mateo, CA 94403. 1-800-950-5880)

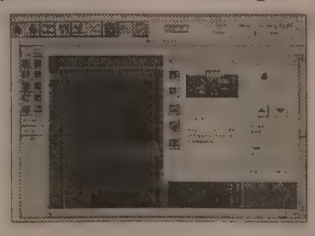
## SimFarm

**Published By:** Maxis
**For:** Macintosh, System 7.0 required
**List Price:** $39.95
**Reviewed By:** Karl Fischer

Live vicariously! Who cares what's going on in the world outside, as long as you have the latest SimProduct to live out your existence with!

Made by the same people who built the ever-popular SimCity, SimFarm allows players to enjoy a clean country lifestyle, grow crops, drive tractors, plow fields—from the comfort of your home.

For what it is, SimFarm is extremely well done. The programming is maddeningly thorough, graced with excellent graphics, animation, and endless options for the video-farming populace. Unfortunately, the subject matter isn't as thrilling.



Players monitor food crop production of any of the twenty-four different kinds. They grow. And you watch. It takes a long time. You may also purchase a plow, if you wish.

SimFarm, like SimCity, SimEarth, and other SimProducts, allows users to interact with a computer-simulated environment by manipulating a broad spectrum of variable conditions. In this case, the environment is a patch of dirt on which players must build a farm. Success (good harvests and greater buying power) depends on how well players cultivate and prepare for seasonal changes and other environmental happenings. The game requires good judgement, from picking which crops to grow, when to plant, and what equipment you buy. Rainfall, geography, climate, natural disasters, and many other variables can be set or changed at any time.

Unfortunately, the rigors of wheat production may bore gamers weaned on arcade-style action or conflict-oriented scenarios (in other words: SimFarm has no plot). It *really* is like planning out a fall harvest. (Maxis, 2 Theatre Sq., Orinda, CA 94563-3346. 510/254-9700)

# PC Software Reviews

## MIDI Renderer v1.3a

**Manufactured By:** DiAcoustics
**For:** MS-DOS 3.1 and higher, Windows 3.0 and higher, OS/2 2.0; CD-ROM drive
**List Price:** $54
**Reviewed By:** Mark Will

If you enjoy music, have a sound card and a fairly large hard disk, or are a professional musician wanting to convert keyboard music to CD-quality music, this product might be for you. MIDI Renderer, from DiAcoustics, produces WAV files from MIDI files.

The typical, older, and more common sound cards use the Yamaha FM-OPL3 chip to play MIDI files. WAV files, on the other hand, are created when you use a microphone and the Windows 3.1 Sound Recorder, and can be played with the Windows Media Player. While the FM-OPL3 chip is quite limited in the number of notes and instruments it can play simultaneously, the WAV files created by MIDI Renderer allow up to sixty-five thousand simultaneous notes and 128 instruments.

Many newer sound cards use the next generation Yamaha chip, the FM-OPL4, to play MIDI music. These newer cards are also called WAV table synthesis cards because they include real instrument samples in ROM chips. Despite this, the sound of a real WAV file is better than MIDI files played on a WAV table synthesis card.

MIDI Renderer comes packaged with software for three operating systems on the same

FREE LABOR • FREE INSTALLATION • FREE LABOR • FREE INSTALLATION

• DELL • EPSON • CANON • COMPAQ • DEC

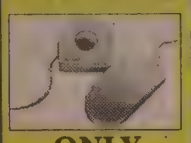
• ACER • ALR • APPLE • AST • AT&T

PANASONIC • POQET • SAMSUNG • SHARP • SUN • TANDON • TI • TOSHIBA • ZENITH

## WESTERN DIGITAL

540MB
$215
HARD DRIVE

## MICROSOFT MOUSE



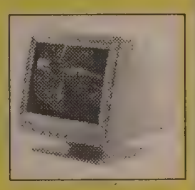
ONLY
$25!

## 14.4K INTERNAL FAX/MODEM

V32, V32bis, V42, V42bis w/MNP5
$55

## 15" SVGA MONITOR

(1280x1024, .28mm Dot Pitch)
Model SRC - 1502
Digital Color Monitor



$299
SHAMROCK

## SUPER LOW PRICES!

## COMPUTER PRICE WAR

HAS BEEN LAUNCHED BY
KATRONIC TECHNOLOGY

COMPUTER SALES & SERVICES
WE DELIVER ADVANCED TECHNOLOGY
Excellent Quality • Reliable Service • Competive Prices

## CD-ROM + Sound Card

DOUBLE SPEED INTERNAL
Only $245!
w/SPEAKER + 5 CD TITLES!

## CASES

| | |
|---|---|
| Mini + P/S | $39 |
| Medium + P/S | $59 |
| Full Size + P/S | $85 |
| Desktop + P/S | $45 |
| Black Cases | CALL |

## MEMORY SIMM

| | |
|---|---|
| 1MB SIMM (3 Chips) | $30 |
| 4MB SIMM, 70ns | $119 |
| 1M * 36 (4MB), 70ns | CALL |
| 2M * 36 (8MB), 70ns | CALL |

*MEMORY PRICES SUBJECT TO CHANGE WITHOUT NOTICE.*

## IPM 486DX-2/66MHZ $1090

- Medium Tower Case w/Double Fans
- 230W Power Supply
- MB 486DX-2/66MHz
- 4MB RAM
- DR 1.44
- FDD/HDD Controller + I/O
- 420MB 12ms IDE Hard Drive
- Microsoft Mouse
- SVGA 32 Bit w/1MB RAM
- 14" Non-Interlaced SVGA Monitor Shamrock
- 101 Key Maxi Keyboard
- VESA Local Bus

intel inside
VESA LOCAL BUS

486DX4/100MHZ .....CALL!

## PENTIUM SYSTEM 60/90MHz

- Medium Tower Case + 230W Power Supply
- Pentium MB 60/66MHz
- 4MB Memory
- DR 1.44
- 420MB Hard Disk
- PCI Diamond Stealth w/2MB
- 14" SVGA Monitor
- Microsoft Mouse
- 101 Keys Keyboard
- IDE w/I/O Vesa Local Bus

CALL (60MHz) $1860 (90MHz)

## COMPONENTS

| | |
|---|---|
| MB 486DX/XX VESA | $89 |
| MB 386DX/40 | $90 |
| Trident VLB 32 | $65 |
| Shamrock 14" N.I. | $205 |
| 250MB Tape Colorado | $155 |
| Diamond Stealth VLB | $149 |
| AT I/O + FDD/HDD VLB | $15 |
| KB 101 Keys | $25 |
| Pro Audio Spectrum 16 | $145 |
| Promise IDE Caching Controller | $109 |
| Hard Disk 420MB | $199 |
| All SCSI Hard Disk | CALL |

## UPGRADE CLONE SYSTEM Replace The Motherboard + CPU + Memory

ANY SYSTEM TO
* IBM 486SLC-66MHz w/1MB..$195
* MB 386DX-40MHz w/128K Cache + 1MB Memory.....$129
* MB 486DX2-66MHz w/256K Cache + Cooling Fan + 01MB Memory$330

FREE LABOR!

TRADE-IN 30pin SIMM to 72pin SIMM MODULE!
**LOW PRICE**

## FREE INSTALLATION

FOR:
HARD DISK • CD ROM • MOTHERBOARD • ALL MISCELLANEOUS HARDWARE & SOFTWARE (If you order from KATRONIC)

KATRONIC COMPANY

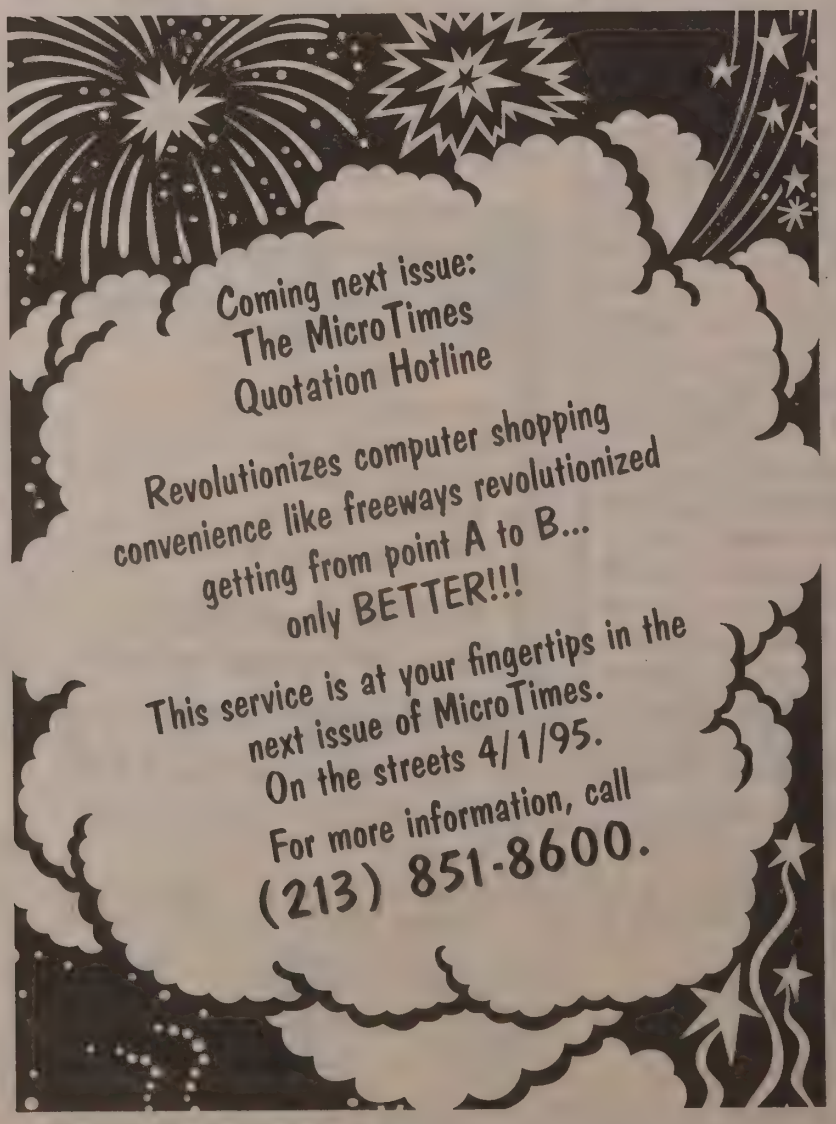
(714) 897-3234 or (714) 895-2084

FAX: (714) 897-9853
14382 HOOVER ST., SUITE A9,
WESTMINSTER, CA 92683

ONE YEAR WARRANTY PARTS & LABOR

MasterCard VISA

FREE LABOR • FREE INSTALLATION • FREE LABOR • FREE INSTALLATION


Coming next issue:
The MicroTimes
Quotation Hotline
Revolutionizes computer shopping convenience like freeways revolutionized getting from point A to B...
only BETTER!!!
This service is at your fingertips in the next issue of MicroTimes.
On the streets 4/1/95.
For more information, call
(213) 851-8600.




floppy disks (DOS, OS/2, Windows), a 90-page manual, and a CD-ROM. The CD contains music samples from which the WAV files are generated and some sample music that was produced by rendering MIDI files at 22kHz/16-bit mono. Additional sample WAV files are downloadable from the Internet by going to home page *http://www.Dacoustic.com/~diac* . The installation is straightforward and requires the CD-ROM to be inserted to complete. The interface to MIDI Renderer is very intuitive. You can easily establish a queue of up to sixteen MIDI files by clicking on the files you wish to render. You may then use Windows dialog boxes to override the default rendering parameters.

For testing purposes I rendered a 17K MIDI file with lots of drum sounds at half the normal CD quality (22kHz/16-bit mono). The rendering process took 40 minutes, resulting in a 5MB file that sounded better but was not worth the waiting time and hard disk space (I don't have a real ear for music). I also rendered the same MIDI file at true CD quality (44kHz/16-bit stereo), but had trouble playing the resulting 22MB file. According to DiAcoustics, stereo rendering/playback at 44kHz/16-bit stereo should be reserved for the fastest systems (like a Pentium). Also, unless you have a large Windows swap file you may get some general protection faults. This is in the manual and is not a problem under MS-DOS or OS/2. (DiAcoustics, Inc., 555 Sparkman Dr., Suite 600-F, Huntsville, AL 35816. 205/722-0490)

## Procomm Plus For Windows v2

**Published By:** Datastorm Technologies, Inc.

**List Price:** $179

**Reviewed By:** John Cowan

When it comes to new software, I've never been an early adopter. I clung to MS-DOS for years while Windows worked out the kinks—but jumped ship instantly when I realized the full power of multitasking. Revelation struck as I mused about Procomm Plus for Windows, the latest incarnation of Datastorm Technology's popular communication interface. "Suppose," I pondered, "while Procomm is dialing CATS (my perennially tardy Internet service), I tab over to the word processor until it connects."

Bingo!

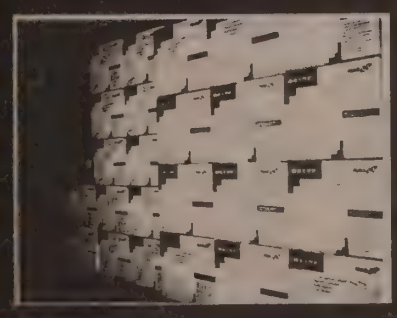
It works like a charm. No more thumbing through boring computer manuals while the busy signals roll by. Just type away on the old word processor, listen for that connection and tab back to Procomm when you hear it come through.

Very heavenly, I tell you, and v2 of Procomm Plus is a fine program. It provides all the capability you'd expect from a full dress communication interface and it wears its heritage well. Most features familiar from the MS-DOS version are retained, and seem improved when cast in the Windows paradigm. The program is easy to learn, requiring minimal reference to the manual, and it self-configures for most popular modems.

Procomm's human interface is especially comfortable and convenient. For example, if you move the vertical scroll bar button up, the interactive data display blends seamlessly into a history buffer, allowing you to scroll through recently received data. Move it back to the bottom and you are once again in the active display.

Version 2 adds fax capability. You can fax documents directly from Windows word processors simply by invoking Print, or you can type a quick memo from within Procomm and send it as a fax. Procomm also receives faxes reliably, automatically answering the phone and storing the received image so you can view, print, forward, or delete it, as desired.

A comprehensive, convenient, reliable communications interface, Procomm Plus for Windows is well worth a look. (Datastorm Technologies, Inc., PO Box 1471, Columbia, MO 65205. 314/443-3282) ■



# The COMPUTER SUPER SHOWS

**Prepare yourself for the largest Computer Show & Sales events in Southern California, The Computer Super Shows.**

**Other shows claim to be "the most powerful shows around", yet no one else can offer you up to 200 exhibits, seminars & presentations every month. Super Shows use only the finest facilities like the Long Beach & Riverside Convention Centers and the extravagant New Hollywood Park Convention Facility. Also, due to the combined size of our shows vendors are forced to fight for your business. This equates to lower prices and better warranty programs than at other shows.**

**The bottom line is this, don't waste your time on small swap meet style shows that promise a lot yet deliver little. Choose the shows that offer you more for your money; better selection, lower prices, seminars & presentations and incredible door prizes.**

***The Computer Super Shows.***

**Up to 200 Exhibits & Seminars**
**Absolutely the best shows in So. Cal.**
**Below Wholesale and Mail Order Pricing**
**FREE Seminars & Presentations**

**The latest in: Complete P.C. Systems, Add-on Boards, Printers, Fax Modems, Multi-Media, Monitors, Disk Drives, Software, Sharware, Notebooks, Accessories, Work Stations, Books, and much much more..**

**Seminars & Presentations covering: The Internet, Word 6.0, Novell, Excel, Windows NT, Accounting, Job Opportunites, Multi-Media, How to Buy a New System,**

## GLENDALE CIVIC AUDITORIUM

**MARCH 11,** SATURDAY ONLY
**APRIL 15,** SATURDAY ONLY
**$6.00 ADMISSION W/ FREE PARKING**
**CHILDREN 12 & UNDER ARE FREE**
**OPEN 10:AM TO 5:PM**

## RIVERSIDE CONVENTION CENTER

**OUR LARGEST RIVERSIDE SHOW YET!**
**APRIL 1-2,** SATURDAY & SUNDAY
**$6.00 ADMISSION W/ FREE PARKING**
**CHILDREN 12 & UNDER ARE FREE**
**OPEN 10:AM TO 5:PM**

## HOLLYWOOD PARK CONVENTION & CASINO

**OUR LARGEST SHOW EVER, PLUS THE ADDED EXCITEMENT OF LIVE HORSE RACING AND LAS VEGAS CLASS CASINO.**
**APRIL 22-23,** SATURDAY & SUNDAY
**$6.00 ADMISSION W/ FREE PARKING**
**CHILDREN 12 & UNDER ARE FREE**
**OPEN 10:AM TO 5:PM**

SUPER SHOW PRODUCTIONS
**1-800-459-6105**

SUPER SHOW PRODUCTIONS
**VIP DISCOUNT COUPON**
**$1.00 OFF** LIMIT ONE COUPON PER CUSTOMER

# Seagate 4.3GB SCSI-2

**ST15150N *FAST SCSI-2***

- 4.3GB Capacity Fast SCSI-2 !
- Highest Performance 3.5" discs!
- Fast Average Seek Time of 8ms !
- 1024KB Cache Buffer, 7200RPM !
- Five Year Full Factory Warranty !
- EXTERNAL UNIT ..... $1799

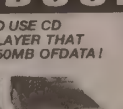
**$1699**

## INTRODUCING THE ALL NEW RECORDABLE CD-ROM DRIVE

NEW! *AN EASY TO USE CD RECORDER/PLAYER THAT STORES UP TO 650MB OFDATA !*

Recordable CD

Recordable CD-ROM that allows users to create multimedia titles, data backup archives and custom audio CDs.



### HARD DRIVES

**Quantum**

**MAVERICK IDE & SCSI-2 SERIES**

| | | | | | |
|---|---|---|---|---|---|
| 540MB | IDE | QM30540MVA | 14ms | 3.5"x1" | $225 |
| 540MB | SCSI | QM30540MVS | 14ms | 3.5"x1" | $228 |

**LIGHTNING IDE & SCSI-2 SERIES**

| | | | | | |
|---|---|---|---|---|---|
| 365MB | IDE | QM30365LTA | 11ms | 3.5"x1" | $199 |
| 540MB | IDE | QM30540LTA | 11ms | 3.5"x1" | $235 |
| 730MB | IDE | QM30730LTA | 11ms | 3.5"x1" | $299 |
| 365MB | SCSI | QM30365LTS | 11ms | 3.5"x1" | $199 |
| 540MB | SCSI | QM30540LTS | 11ms | 3.5"x1" | $249 |
| 730MB | SCSI | QM30730LTS | 11ms | 3.5"x1" | $299 |

| *EMPIRE FAST SCSI-2 SERIES* | | | | INT | EXT |
|---|---|---|---|---|---|
| 1.0GB | EMP1080S | 9.5ms | 3.5"x1" | $599 | $699 |
| 2.1GB | EMP2100S | 8.9ms | 3.5" | $889 | $989 |

| *ATLAS FAST SCSI-2 SERIES* | | | | INT | EXT |
|---|---|---|---|---|---|
| 1.08GB | XP31070S | 8.5ms | 7200RPM | $969 | $1069 |
| 2.1GB | XP32150S | 8.5ms | 7200RPM | $1099 | $1199 |
| 4.3GB | XP34300S | 8.5ms | 7200RPM | $1699 | $1799 |

| *Grand Prix FAST SCSI-2 SERIES* | | | | INT | EXT |
|---|---|---|---|---|---|
| 2.1GB | GP32151S | 8.5ms | 7200RPM | $1099 | $1199 |
| 4.28GB | GP34301S | 8.5ms | 7200RPM | $1699 | $1799 |

**Maxtor**

**IDE & ENHANCED IDE DRIVES**

| | | | | |
|---|---|---|---|---|
| 420MB | 7420AV | 12ms | 3.5"x1" | $185 |
| 540MB | 7540AV | 12ms | 3.5"x1" | $219 |
| 540MB | MXT540A | 8.5ms | 3.5"x1" | $299 |
| 546MB | 7546A | 12ms | 3.5"x1" | $239 |
| 850MB | 7850A | 12ms | 3.5"x1" | $269 |
| 1.2GB | 71260A | <12ms | 3.5"x1" IDE | $409 |

**CONNER**

*The Storage Answer*

**IDE & ENHANCED IDE DRIVES**

| | | | | |
|---|---|---|---|---|
| 420MB | CFS420A | 14ms | 3.5"x1" | $179 |
| 540MB | CFS540A | 12ms | 3.5"x1" | $209 |
| 850MB | CFA850A | <12ms | 3.5"x1" IDE | $269 |
| 1.27GB | CFA1275A | 12ms | 3.5"x1" | $425 |

| **FAST SCSI-2 DRIVES** | | | | INT | EXT |
|---|---|---|---|---|---|
| 1.0GB | CFP1060S | <12ms | 3.5"x1" | $525 | $619 |
| 2.1GB | CFP2105S | <9ms | 5400RPM | $849 | $959 |
| 2.1GB | CFP2107S | <9ms | 7200RPM | $1065 | $1169 |
| 4.2GB | CFP4207S | <9ms | 7200RPM | $1999 | $2099 |

**WESTERN DIGITAL**

*IDE & ENHANCED IDE DRIVES*

| | | | | |
|---|---|---|---|---|
| 420MB | WDAC2420 | 13ms | 3.5"x1" | $185 |
| 540MB | WDAC2540 | 12ms | 3.5"x1" | $239 |
| 700MB | WDAC2700 | 10ms | 3.5"x1" | $269 |
| 850MB | WDAC2850 | <10ms | 3.5"x1" | $299 |
| 1.0GB | WDAC31000 | <10ms | 3.5"x1" | $409 |
| 1.28GB | WDAC31200 | <10ms | *"NEW"* IDE | $459 |

**IBM**

**IDE DRIVES**

| | | | | |
|---|---|---|---|---|
| 728MB | 70G8850 | 12ms | 3.5"x1" | $299 |
| 1.0GB | 94G3183 | 12ms | 3.5"x1" | $459 |

| **FAST SCSI-2 DRIVES** | | | | INT | EXT |
|---|---|---|---|---|---|
| 540MB | 94G2646 | 12ms | 3.5"x1" | $239 | $339 |
| 728MB | 94G2647 | 12ms | 3.5"x1" | $329 | $429 |
| 1.0GB | 94G3184 | 10.5ms | 3.5"x1" | $529 | $629 |
| 2.0GB | 94G3054 | 7.5ms | 7200RPM | $1229 | $1329 |

**FUJITSU**

| **IDE & SCSI-2 PicoBird Series** | | | | INT | EXT |
|---|---|---|---|---|---|
| 530MB | M2684TAU | 12ms | 3.5"x1" IDE | $209 | $N/A |
| 530MB | M2684SAU | 12ms | 3.5"x1" SCSI | $225 | $319 |
| 1.0GB | M2694ESA | 9.5ms | 3.5" SCSI | $499 | $599 |

### 2.5" NOTEBOOK DRIVES

**Seagate**

| | | | |
|---|---|---|---|
| 209MB | ST9235AQ | 16ms | IDE ..... $279 |
| 340MB | ST9385AQ | 16ms | IDE ..... $309 |
| 540MB | ST9655AQ | 16ms | IDE ..... $459 |

**Quantum**

| | | | |
|---|---|---|---|
| 256MB | DY256AT | 17ms | IDE ..... $269 |
| 514MB | DY514AT | 17ms | IDE ..... $449 |
| 256MB | DY256S | 17ms | SCSI ..... $279 |
| 514MB | DY514S | 17ms | SCSI ..... $499 |

**TOSHIBA**

| | | | |
|---|---|---|---|
| 262MB | MK1724FCV | 13ms | IDE ..... $235 |
| 352MB | MK1824FCV | 13ms | IDE ..... $279 |
| 528MB | MK2526FC | 13ms | IDE ..... $409 |
| 704MB | MK2528FC | 13ms | IDE ..... $559 |
| 810MB | MK2628FC | 13ms | IDE ..... $629 |

**PINNACLE MICRO**

*Recordable CD*

**650MB Recordable/Playable CD**

- Model RCD-1000**
- Double Speed 1MB Cache
- ISO 9660,HFS,Red Book Audio
- SW to Make Data,Audio&Video CDs
- For PC or MAC. w/Controller for PC...$2099

**$1945**

### HARD DRIVES

**MICROPOLIS**

| **IDE DRIVE** | | | | |
|---|---|---|---|---|
| 1.75GB | MC2217A | 10ms | 3.5" | $689 |

| *FAST SCSI-2 DRIVES* | | | | INT | EXT |
|---|---|---|---|---|---|
| 1.0GB | MC4110 | 8.5ms | 3.5"x1" | $599 | $699 |
| 1.75GB | MC2217 | 10ms | 3.5" | $819 | $929 |
| 2.0GB | MC4221 | 8.5ms | 3.5"x1" | $999 | $1099 |
| 3.0GB | MC1936 | 13ms | 5.25" | $999 | $1199 |
| 4.0GB | MC3243 | 8.5ms | 3.5" | $1449 | $1549 |
| 9.1GB | MC1991 | 11ms | 5.25" | $2759 | $2959 |

| *AUDIO VISUAL SCSI-2 DRIVES* | | | | INT | EXT |
|---|---|---|---|---|---|
| 1.75GB | MC2217AV | 10ms | 3.5" | $1049 | $1149 |
| 2.0GB | MC4221AV | 8.5ms | 3.5"x1" | $1199 | $1299 |
| 3.0GB | MC1936AV | 13ms | 5.25" | $1349 | $1549 |
| 4.0GB | MC3243AV | 8.5ms | 3.5" | $2099 | $2199 |
| 9.1GB | MC1991AV | 11ms | 5.25" | $3249 | $3449 |

**Seagate**

| **IDE & ENHANCED IDE DRIVES** | | | | |
|---|---|---|---|---|
| 341MB | ST3391A | 13ms | Fast ATA | $228 |
| 428MB | ST3491A | 14ms | Fast ATA | $248 |
| 545MB | ST5660A | 12ms | Fast ATA-2 | $279 |
| 850MB | ST5850A | 11ms | Fast ATA-2 | $299 |
| 1.0GB | ST31220A | 12ms | Fast ATA-2 | $429 |

| **FAST SCSI-2 DRIVES** | | | | INT | EXT |
|---|---|---|---|---|---|
| 545MB | ST5660N | 12ms | 3.5"x1" | $339 | $439 |
| 1.0GB | ST31230N | 10ms | 3.5"x1" | $539 | $639 |
| 1.0GB | ST31250N | 8.5ms | 3.5"x1" | $739 | $839 |
| 1.0GB | ST31200N | 9ms | 3.5"x1" | $535 | $635 |
| 2.1GB | ST12400N | 9ms | 3.5" | $859 | $959 |
| 2.1GB | ST32430N | 10ms | 3.5"x1" | $929 | $1029 |
| 2.1GB | ST32550N | 8ms | 3.5"x1" | $1069 | $1169 |
| 4.3GB | ST15150N | 8ms | 3.5" | $1699 | $1799 |
| 4.3GB | ST15230N | 9ms | 3.5" | $1539 | $1639 |
| 9.0GB | ST410800N | 11.5ms | 5.25" | $3199 | $3389 |

**HEWLETT PACKARD**

| *FAST SCSI-2 DRIVES* | | | | |
|---|---|---|---|---|
| 1.05GB | HPC3323A | 10.5ms | 3.5"x1" | $559 ... $629 |
| 2.1GB | HPC2490 | 8.9ms | 3.5" | $999 .. $1099 |

### WIDE SCSI DRIVES

**Seagate**

| | | | | INT | EXT |
|---|---|---|---|---|---|
| 1.0GB | ST31200W | 9ms | 3.5"x1" | $649 | $939 |
| 2.1GB | ST12550W | 8.9ms | 3.5" | $1229 | $1499 |
| 2.1GB | ST32550W | 9ms | 3.5"x1" | $1259 | $1549 |
| 4.3GB | ST15150W | 8ms | 3.5" | $1999 | $2299 |
| 9.0GB | ST410800WD | 11.5ms | 5.25" | $3599 | $N/A |

**CONNER**

| | | | | | |
|---|---|---|---|---|---|
| 1.0GB | CFP1060W | <10ms | 3.5"x1" | $699 | $959 |
| 2.1GB | CFP2105W | 5400RPM | *"NEW"* | $Call | $Call |
| 2.1GB | CFP2107W | 7200RPM | *"NEW"* | $Call | $Call |
| 4.2GB | CFP4207W | 7200RPM | *"NEW"* | $Call | $Call |

**IBM**

| | | | | | |
|---|---|---|---|---|---|
| 1.0GB | 45G9486 | 8.6ms | 3.5"x1" | $679 | $959 |
| 2.0GB | 94G3055 | *FAST* | *"NEW"* | $1399 | $1689 |

**PINNACLE MICRO**

*Recordable CD*

**Recordable CD-ROM Drives**

| | | |
|---|---|---|
| RCD-1000 MAC | External with SW for MAC | $1945 |
| RCD-1000 PC | External with SW for PC | $1945 |
| RCD-1000 PC20 | External w/Adaptec Interface | $2049 |

*Tahoe 230*

*The Next Generation of the First Portable Optical Drive*

| | | |
|---|---|---|
| Tahoe230 MAC | Portable 230MB for MAC | $899 |
| Tahoe230 PCT | Portable for PC (Parallel) | $1049 |
| Tahoe230 PCA | Portable w/Adaptec Interface | $1089 |
| Tahoe230 PCAN | Portable for PC (no Interface) | $869 |
| Pak-Travel | Battery,charger & travel case | $195 |

*Sierra 1.3GB*

*1.3GB Optical Hard Drive Storage System*

| | | |
|---|---|---|
| Sierra1.3 MAC | External 1.3GB for MAC | $2249 |
| Sierra1.3 PC | External w/Adaptec Interface | $2399 |
| Sierra1.3 PCAN | External for PC (no Interface) | $2289 |
| Sierra1.3 PCI | Internal w/Adaptec Interface | $2249 |

*Orray 5.2GB*

*Four Drive Multi-channel Optical Disk Systems*

| | | |
|---|---|---|
| Orray5.2 MAC | 5.2GB System for MAC | $8999 |
| Orray4.8 PC | 4.8GB System for PC | $6239 |
| Orray4.8 NOVL | 4.8GB System for Novell | $6299 |

*Optical Media*

| | | |
|---|---|---|
| OMD-230HS | 3.5" 230MB High Speed Media | $39 |
| OMD1200HS | 5.25" 1.2GB 512k Hi Speed (Unversal) | $119 |
| OMD1300HS | 5.25" 1.2GB 1024k Hi Speed (MAC) | $119 |
| RCD-74 | Recordable compact disc 74min | $19 |

**PINNACLE MICRO**

*Sierra 1.3GB*

- 5.25" 1.3GB Optical hard drive storage system.
- Provides unlimited storage with removable media for on-line, secondary,or archived data.
- High Performance optical that combines unlimited high capacity storage with hard drive speeds @ 19ms & up to 4MB/Sec throughput.

### MONTHLY SPECIALS

**MICROPOLIS**

**3.0GB FAST SCSI-2**

- Model MC1936
- 13ms FAST-5.25" FH
- 5400 RPM-512K Cache
- 5 YEAR WARRANTY

**$999**

**Seagate**

**9.0GB FAST SCSI-2**

- Model ST410800N
- 11ms FAST, 5.25" FH
- 5400 RPM, 1MB Cache
- 5 YEAR WARRANTY

**$3199**

**EXABYTE®**

**4.0GB 3.5" SCSI-II DAT BACK-UP**

- INT Model EXB-4200C
- Uses 4mm 90M DDS Tapes
- Up to 29MB/min backup compressed
- 4GB Hardware compressed

External Unit ..... $899

**$799**

### TAPE BACKUP DRIVES

**EXABYTE®**

**1.5GB Internal FS1G Tape Drive Kit**

- Adaptec 16-Bit SCSI Controller Card
- BACKUP Software
- Up to 30MB/Min Transfer
- One Data Cartridge

External Kit ..... $829

**$689**

| | | INT/EXT |
|---|---|---|
| EXB-2501 | 1GB 567KB/sec | $489/$619 |
| EXB-4200C | 4GB up to 28MB/min w/Comp | $799/$899 |
| 8205XL | 3.5-7GB up to 32MB/min w/Comp | $1289/$1599 |
| 8505XLI | 7-14GB upto 60MB/min w/Comp | $2059/$2319 |
| EXB-8KT | Exabyte 5.25" Bracket for 3.5" Units | $39 |

**HEWLETT PACKARD**

*The Most Reliable SCSI Tape Backup for MAC,PC or SUN .*

| **DAT SERIES (4mm)** | | INT / EXT |
|---|---|---|
| 35470A | 2.0GB 3.5" 183kb/sec DDS | $759/$829 |
| 35480A | 4-8GB 3.5" up to 732kb/sec DDS | $859/$949 |
| C1533A | 4-8GB HW DataCompression DDS-2 | $1019/$1119 |

**CONNER**

| **1/4" Archive VIPER SERIES** | | INT | EXT |
|---|---|---|---|
| 2150S | 250MB 112KB/sec | $399 | $399 |
| 2525S | 525MB 200KB/sec | $469 | $569 |

**Python™ DAT SERIES (4mm)**

| | | |
|---|---|---|
| 4320/50 | 2GB up to 11MB/min - INT/EXT | $799/$999 |
| 4326NP | 4-8GB 5MB/sec1MB Cache-INT | $928 |
| 4356XP | 4-8GB w/Comp1MB Cache-EXT | $1159 |
| 4324T | 4GB Turbo1MB Cache Int/Ext | $829/$939 |

CONNER TAPE-STOR™

| | | |
|---|---|---|
| TS250 | 250MB Runs Off Floppy Port | $148 |
| TS420 | 420MB Runs Off Floppy Port | $169 |
| TS420P | 420MB Runs Off Parallel Port | $319 |
| TS850 | 850MB QIC WIDE Floppy Port | $264 |
| TS850P | 850MB QIC WIDE Parallel Port | $399 |
| TS4000 | 4.0GB QIC WIDE-SCSI | $529 |
| TS4000E | 4.0GB QIC WIDE-SCSI External | $639 |

**COLORADO MEMORY SYSTEMS INC.**

| | | |
|---|---|---|
| DJ20 | 250MB (JUMBO 250) | $149 |
| DJ35 | 350MB (JUMBO 350) | $169 |
| DJ25 | 680MB (JUMBO 700) | $269 |
| DJ50 | 1.4GB (JUMBO 1400) *"NEW"* | $399 |
| JT35 | 350MB TRAKKER 350 | $339 |
| JT25 | 680MB TRAKKER 700 | $429 |
| PT10 | 1.0GB SCSI-2 Internal only | $589 |
| PT25 | 2.0GB SCSI-2 INT/EXT | $929/$1069 |

**WangDAT**

| **4mm DAT SCSI-2 TAPE BACKUP** | | INT / EXT |
|---|---|---|
| 3100 | 2.0GB 3.5" DDS 183kb/s | $699/$799 |
| 3200 | 4-8GB 3.5" DDS-DC up to 366kb/s | $869/$969 |
| 3400DX | 4-8GB DDS-2 22-44mb/min | $999/$1099 |

**WANGTEK**

| ***5.25" 1/4" SCSI TAPE BACKUP*** | | | INT / EXT |
|---|---|---|---|
| 5150ES | 250MB | 6.75MB/min | $319/$409 |
| 5525ES | 525MB | 12 MB/min | $445/$535 |
| 51000HT | 1.2GB | 17.1MB/min | $649/$739 |
| 9500DC | 5-10GB | 36-72MB/min | $1149/$1249 |

### SCSI BACKUP SOFTWARE

**NovaBack by NovaStor**

| | | |
|---|---|---|
| NBDOS | SINGLE USER FOR DOS | $35 |
| NBWIN | SINGLE USER FOR WINDOWS | $69 |
| NBOS/2 | SINGLE USER FOR OS/2 | $39 |
| NBNET.Jr | NLM JUNIOR (DOS) | $89 |
| NBMAC | Nova MAC for Macintosh | $99 |

**PINNACLE MICRO**

*Tahoe 230*

- 3.5" 3600RPM 230MB Removable, Portable, Optical storage system for both notebook and desktop computers.
- Connects directly to the SCSI or parallel port.
- Uses ISO standard 128 & 230MB Cartridges.

### IDE & SCSI CONTROLLERS

**adaptec**

| | | |
|---|---|---|
| 1505 | 16-Bit ISA TOTAL CD SCSI-2 | $59 |
| 1515 | 16-Bit ISA TOTAL CONNECT SCSI-2 KIT | $89 |
| 1520 | 16-Bit ISA SCSI-2 7 Device CARD Only | $99 |
| 1522 | 16-Bit ISA SCSI-2 7Device & 2FD KIT | $135 |
| 1542CFK | 16-Bit BusMaster Fast SCSI-2 KIT/CARD | $235/$199 |
| ANM-1570 | Full SCSI ISA with Advanced Audio | $255 |
| 1840 | 32-Bit MicroChannel for PS/2,7HD KIT | $299 |
| 2742T | 32-Bit TWIN-EISA KIT, 14HDs | $349 |
| 2742W | 32-Bit WIDE EISA KIT w/WIDE CABLE | $379 |
| 2825VL | 32-Bit VLB E-IDE/SCSI-2 KIT | $169 |
| 2842A-VL | 32-Bit Fast SCSI-2 VLB KIT | $259 |
| APA-1460 | Slim SCSI PCMCIA KIT **NEW Release** | $199 |
| APA-1510 | CARD PARK -PCMCIA CARD Reader **NEW** | $189 |
| 2940 | 32-Bit PCI SCSI-2 KIT RISC-BASED I/O | $279 |
| 2940W | 32-Bit PCI Wide KIT w/ WIDE CABLE | $349 |
| 3940 | DUAL CHANNELL PCI CONTROLLER KIT | $409 |
| T348 | Parallel to SCSI Plus 250KB/S | $125 |
| T358 | Parallel to SCSI EPP 1MB/S | $159 |

**BUSLOGIC**

*High Performance IDE Caching Controllers*

| | | |
|---|---|---|
| KT-410A | 32-Bit VLB up to 20MB/sec 4HD to 4GB | $125 |
| KT-510A | 16-Bit ISA up to 5MB/sec 4HD up to 4GB | $95 |
| KT-910A | 32-Bit PCI up to 20MB/sec 4HD to 4GB | $178 |

*High Performance SCSI-2 Controllers*

| | | |
|---|---|---|
| KT445C | 32-Bit VLB Fast SCSI-2 KIT | $199 |
| KT545C | 16-Bit ISA BusMaster Fast SCSI-2 KIT | $209 |
| KT742A | 32-Bit EISA SCSI-2 KIT | $289 |
| KT747C | 32-Bit EISA Fast SCSI-2 KIT | $299 |
| BT757S | 32-Bit EISA Fast Wide SCSI Card | $349 |
| SW-190 | Software Drivers for BT757S | $49 |
| KT946C | 32-Bit PCI Fast SCSI-2 KIT | $259 |
| KT956C | 32-Bit PCI Fast Wide SCSI-2 KIT | $315 |

**qlogic™** **Q logic**

*FAST SCSI-2 Controllers*

| | | |
|---|---|---|
| QLISA-CD | 16-Bit ISA for CD ROMs | $49 |
| QLISA/FL | 16-Bit ISA/ISA-FL | $105/$119 |
| QLVLB/FL | 32-Bit VLB/VLB-FL | $189/$205 |
| QLEISA/FL | 32-Bit EISA/EISA-FL | $199/$209 |
| QLPCMCIA | PCMCIA Corel SCSI Drivers | $179 |
| QLPCI-B | 32-Bit PCI Basic Entry Level | $129 |
| QLPCI-W | 32-Bit IO-PCI Wide SCSI-3 | $299 |
| QLPCI-10 | 32-Bit IO-PCI Model 10 Narrow | $224 |

**FUTURE DOMAIN**

*High Performance SCSI Controllers*

| | | |
|---|---|---|
| TMC850C | 8-Bit SCSI Card with BIOS | $45 |
| TMC850K | 8-Bit SCSI w/ BIOS & S/W Drivers | $65 |
| TMC1610 | 16-Bit CD ROM KIT | $65 |
| PNP1630 | 16-Bit SCSI w/PowerSCSI | $Call |
| TMC1660 | 16-Bit Value Pack No Floppy | $119 |
| TMC1680 | 16-Bit Value Pack 7HD/4FD | $119 |
| SCSI2GO | PCMCIA TYPE-II Fast SCSI-2 (10mb/s) | $289 |
| TMC3260 | 32-Bit PCI VALUEPACK w/PowerSCSI | $199 |
| MCS700 | 16-Bit Micro Channel w/PowerSCSI | $199 |

**gsi**

*Increases Performance of IDE & Floppy Drives Doubles the Transfer Rate on Floppy Tape Backups.*

*HighPerformance IDE Controllers w/Intelligent BIOS*

| | | |
|---|---|---|
| 11 | 8-Bit 4FD(2.88) -250MB Tape Accel Card | $49 |
| 18 | 16Bit 2HD Co-Exist w/IDE-MFM-ESDI-RLL-SCSI | $45 |
| 21 | 16Bit ISA BUS 2HD/4FD (2.88 Support) | $59 |
| 32 | 16Bit MultiPort IDE,Floppy,Tape,HiPerf. I/O | $109 |

**Acculogic**

*** IDE & Enhanced IDE Controllers ***

| | | |
|---|---|---|
| sIDE-1/16 | 8BIT PC/XT IDE CONT. W/BIOS | $39 |
| sIDE-2 | 32-Bit PCI 2HD/ENHANCED IDE | $39 |
| sIDE4/VL | 32-Bit 2HD/2FD(2.88)16550 I/O VLB E-IDE | $89 |

**PROMISE TECHNOLOGY, INC.**

*IDE & SCSI CONTROLLERS*

| | | |
|---|---|---|
| EIDE2300+ | Enhanced IDE VLB w/16550 IO & Ext BIOS | $69 |
| DC440 | BusMaster SCSI/IDE VLB w/IO | $189 |
| DC4030VL2 | 4HD/2FD 19MB/S Transfer Rate 2.88 Support | $109 |
| DC5030 | BusMaster PCI IDE Caching Controller | $149 |

**HDSS** IDE & E-IDE CONTROLLERS

| | | |
|---|---|---|
| 200 | 16Bit ISA 2HD/2FD Controller w/Cables | $12 |
| 211 | 16Bit ISA 2HD/2FD w/2Serial\1Par\1Game | $19 |
| 243 | 32Bit VLB 2HD/2FD 2S/1P/1G E-IDE | $49 |
| 400 | 16Bit ISA 2HD/2FD 2-16550S/1EPP/1G | $39 |
| 500 | 32Bit VLB 2HD/2FD 2-16550S/1EPP/1G | $44 |
| 600 | 32Bit PCI 2HD 2-16550S/1EPP/1G E-IDE | $54 |

**PINNACLE MICRO**

*Orray 5.2GB*

**Optical Disk System**

- Revolutionary multi-channel, RISC-based storage server.
- Ideal for vertical applications such as network storage, digital video and digital audio applications.
- Up to 8MB/Sec Data transfer rate.

### MEMORY SIMMS & CPU'S

**PC & MAC Memory**

**** Call for Lowest Prices ****

| | | |
|---|---|---|
| 1x3/60-70ns | 1MB 3 Chip 30 Pin 60 or 70ns | $Call |
| 1x9/60-70ns | 1MB 9 Chip 30 Pin 60 or 70ns | $Call |
| 1x8/60-70ns | 1MB 8 Chip 30 Pin 60 or 70ns | $Call |
| 4x9/60-70ns | 4MB 9 Chip 30 Pin 60 or 70ns | $Call |
| 4x3/60-70ns | 4MB 3 Chip 30 Pin 60 or 70ns | $Call |
| 1x36/60-70ns | 4MB 72 Pin 60 or 70ns w/Parity | $Call |
| 1x32/60-70ns | 4MB 72 Pin 60 or 70ns No Parity | $Call |
| 2x36/60-70ns | 8MB 72 Pin 60 or 70ns w/Parity | $Call |
| 2x32/60-70ns | 8MB 72 Pin 60 or 70ns No Parity | $Call |
| 4x36/60-70ns | 16MB 72 Pin 60 or 70ns w/Parity | $Call |
| 4x32/60-70ns | 16MB 72 Pin 60 or 70ns No Parity | $Call |
| 8x36/60-70ns | 16MB 72 Pin 60 or 70ns w/Parity | $Call |

**INTEL 486 & PENTIUM CPU's**

| | |
|---|---|
| DX33\2-50\2-66\4-100 | $119\$135\$189\$289 |
| P60\P66\P90\P100 | $299\$315\$629\Call |

**AMD 486 DX CPU's**

| | |
|---|---|
| DX2-50\DX4-100 | $119\$255 |
| DX2-66(3Volt/5Volt) | $139\$169 |
| DX2-80(3Volt/5Volt) | $149\$199 |

**Cyrix 486 DX CPU's**

| | |
|---|---|
| DX2-66(5Volt) | $139 |

### CD ROM DRIVES

**PIONEER** *The Art of Entertainment*

*THE HIGH SPEED CD-ROM MINI-CHANGER*

- DOS, Mac, OS/2, WIN, VMS, Sun OS, Solaris & UNIX support
- 2048/512 Byte Selectable For Workstations
- Includes S/W for DOS/WIN & Mac Plus a CD Magazine

| | | |
|---|---|---|
| DRM-602X | 6-Disc 2X Speed 307kb/sec | $389 |
| DRM-604X | 6-Disc 4X QUADRASPIN 614kb/sec | $789 |
| DRM-1804X | 18-Disc 4X QUADRASPIN 614kb/sec | $1799 |
| PIONEER SINGLE DISC QUADRASPIN | INT/EXT | |
| CDR-U104X | 240ms-614kb/sec-256K Cache | $329/$429 |
| DRM-A600 | 6 CD MAGAZINE | $29 |

**TOSHIBA**

- 256KCache Buffer• Caddy Included

| | INT / EXT |
|---|---|
| XM3501B Quad-Speed 4X120ms/600kb | $309/$409 |

**NEC**

| DATA & VIDEO CD-PLAYBACK CD-ROMs | KIT*/UNIT |
|---|---|
| CDR401 3Xp Plus 240ms/500kb/SCSI-2 | $469/$389 |
| CDR500 3Xi Triple Speed 195ms/450kb | $379 |
| CDR501 4Xi 220ms/600kb/SCSI-2 | $469/$389 |
| CDR601 4Xe 220ms/600kb/SCSI-2 | $549/$489 |

*KIT Includes(16-Bit card &sw,Microsoft Encyclopedia)

**PLEXTOR**

**4PLEX *Lightning Fast* Quad Speed CD-ROMs**

- 125/150ms Random Seek
- 256k/1MB Cache Buffer
- 600kb/secDataTransferRate
- MultiPlatform-PC,Mac,UNIX

| | INT / EXT |
|---|---|
| PX-43CS/45CS 4-Speed, 256K Cache | $329/$479 |
| PX-43CH/45CH 4-Speed,1MB Cache | $399/$499 |
| PX-45CHMAC 4-Speed,1MB Cache | $529 |

**CHINON**

| *SCSI-2 CD-ROM DRIVE* | INT/EXT |
|---|---|
| CDS-535 2X, 220ms, 256kCache, 300kbs | $199/$369 |

**TEAC** SuperQuad 4X

- Standard 3.5"144 Drive (MKF-508A)
- 4X AT-CD,195ms,600Kb/sec
- Sound Blaster Compatible
- Easy to use Plug & Play.

| | |
|---|---|
| CD-55AB SuperQuad 4X AT Drive | $199 |
| CD-55AK SuperQuad 4X AT KIT | $219 |
| CF-506A ComboQuad 4X CD w/1.44 Floppy | $329 |

### VIDEO ACCELERATOR CARDS

**DIAMOND** MULTIMEDIA

| | | |
|---|---|---|
| •Stealth 64 Series | | |
| DRAM | VLB or PCI 1MB/2MB | $139/$189 |
| VRAM | VLB or PCI 2MB/4MB | $289/$429 |
| •Viper Series | | |
| ViperSE | VLB or PCI 2MB/4MB VRAM | $259/$429 |
| •SpeedStar Series | | |
| S5-Pro | 1MB DRAM VLB/ISA | $109/$99 |
| S5-64 | PCI or ISA 1MB/2MB DRAM | $149/$199 |
| S5-SE | PCI or VLB 1MB/2MB DRAM | $99/$154 |

**ATI**

| | |
|---|---|
| Graphics Ultra Pro Turbo 64 VLB, PCI or ISA 2MB/4MB (VRAM) | $329/$409 |
| WIN Turbo 64-bit (1280x1024) VLB, PCI or ISA 2MB (VRAM) | $299 |
| Graphics Xpression, (1280x1024) VLB, PCI or ISA 1MB/2MB (DRAM) | $165/$219 |

---

**To Order Call:** FAX (510) 494-8501

# 800-252-9777

# HDSS COMPUTER PRODUCTS

*"Your Hard Drive & Multimedia SuperSource"*

**PURCHASE ORDERS WELCOME**

*"Dedicated to SERVING Purchasing Agents Worldwide"*

Gov't, University & Approved Corporate PO's Welcome

**M-F 6a-7p; Sat 8a-5p; Sun 9a-4p PST**

**6225 Jarvis Ave. Newark, CA, 94560**

- NO SURCHARGE FOR CREDIT CARDS
- 14 Day Money Back Guarantee.
- Dealers Qty Pricing is Available.
- Returns accepted with RMA#, and in original Packing and Condition.
- Returned Items for refund are subject to 12% restocking fees.
- Free delivery within 50 mile radius to corporate customers.
- Memory Simms, CPUs, and Items that include Software are not refundable.
- Price & Availability are subject to change. Not responsible for typos or Technical errors.
- All logos are the property of their respective companies.

© Copyright 1993 Mark Moss Press ad. All rights are reserved. Prices and availability are subject to change. Not responsible for typographical errors.

PO'S COD'S VISA

**CORPORATE HDSS**

- Pre-approved purchase orders for Fortune 1000 companies and government agencies.
- Qty and dealer discounts are available.
- All educational institutions are welcome.
- International orders are welcome.

**(510) 494-8100**

*Fax in your PO's to:* (510) 494-8501

Electronic & Bank Contact Verification To Prevent Fraud

Full Cooperation with Police for all fraud Orders

# IT JUST DOESN'T GET ANY BETTER THAN THIS!

## PCI PENTIUM SYSTEM

- 4-PCI Bus Master, 4-ISA Slots
- Intel Pentium Processor
- CPU Heatsink & Cooling Fan
- 16MB RAM, 256 Fast Write Back Cache
- 1.44MB Floppy Disk
- 420MB IDE Hard Disk
- PCI IDE Controller Up To 4HDD
- 2 Serial, 1 Parallel & 1 Game Ports
- PCI SVGA Win. Accelerator 1MB RAM, 1280x1024
- 14" SVGA Monitor, 1280x1024, .28dp, N.I.
- Mini Tower Case, 101 KB & Hi-Resolution Mouse

Pentium 90MHz $1795 BEST BUY!

| | |
|---|---|
| Pentium 100MHz | $1895 |
| Pentium 75MHz | $1535 |
| Dx2-66MHz | $1280 |

UPGRADE OPTIONS:

| | |
|---|---|
| 1GB IDE HDD | $255 |
| Total 32MB RAM | $425 |
| Diamond Stealth 64 2MB V/D RAM | $210/$110 |

## PCI PENTIUM MULTIMEDIA SYSTEM

- 4-PCI Bus Master, 4-ISA Slots
- Intel Pentium Processor
- CPU Heatsink & Cooling Fan
- 16MB RAM, 256 Fast Write Back Cache
- 1.44MB Floppy Disk
- 850MB IDE Hard Disk Mode 3
- PCI Enhanced IDE Controller Up To 4HDD
- PCI SVGA Win. Accelerator 1MB RAM, 1280x1024 Upgrade to 2MB
- 15" SVGA Monitor, 1280x1024, .28dp, N.I.
- Mid Tower Case, 101 KB & Hi-Resolution Mouse
- 4x CD ROM, Pair Speaker
- 16Bit Sound Blaster MCD

Pentium 90MHz $2265 BEST BUY!

| | |
|---|---|
| Pentium 100MHz | $2385 |
| Pentium 75MHz | $2005 |
| Dx2-66MHz | $1750 |

UPGRADE OPTIONS:

| | |
|---|---|
| 1.0GB HDD | $175 |
| Total 32MB RAM | $445 |
| Diamond Stealth 64 2MB V/D RAM | $210/$110 |
| 17" Monitor | $325 |

## PENTIUM SCSI SYSTEM

- 4-PCI Bus Master, 4-ISA Slots
- Intel Pentium 90MHz Processor
- CPU Heatsink & Cooling Fan
- 256 Fast Write Back Cache
- 16MB RAM
- 1.44MB Floppy Disk
- 1.06GB SCSI II Hard Disk
- SCSI II Controller
- 7 Bay Mid Tower Case
- 101 KB & Hi-Resolution Mouse
- No VGA Card & Monitor

| | |
|---|---|
| Pentium 90MHz | $1950 |
| Pentium 100MHz | $2050 |
| Pentium 75MHz | $1690 |
| Pentium 66MHz | $1800 |
| Dx2-66MHz | $1255 |

UPGRADE OPTIONS:

| | |
|---|---|
| Adaptec 2940 | $120 |

## FOR OUR LOCAL CUSTOMERS WE PROVIDE:

- ❑ PC Repair
- ❑ System Upgrade
- ❑ Memory Upgrade
- ❑ Network Consultation
- ❑ Network Installation
- ❑ CNE's Work For You
- ❑ Pick-Up and Delivery For You
- ❑ On Site Service

## VLB MULTIMEDIA SYSTEM

- 3-VLB, 4-ISA Slots
- Intel Processor
- CPU Heatsink & Cooling Fan
- 16MB RAM, 256 Fast Write Back Cache
- 1.44MB Floppy Disk
- 540MB IDE Hard Disk Support Mode 3
- VLB Enhanced IDE Controller Up To 4HDD
- VLB SVGA Win. Accelerator 1MB RAM, 1280x1024
- 14" SVGA Monitor, 1024x768, .28dp N.I.
- Mini Tower Case, 101 KB & Hi-Resolution Mouse
- 2x CD ROM, Pair Speakers
- 16Bit Sound Card

66MHz Intel $1415 BEST BUY!

| | |
|---|---|
| NEW! 80MHz AMD | $1430 |
| NEW! 100MHz AMD | $1599 |

UPGRADE OPTIONS:

| | |
|---|---|
| 850MB HDD | $100 |
| Total 32MB RAM | $425 |
| Diamond Stealth 64 2MB V/D RAM | $250/$150 |
| 4x Speed CD ROM | $100 |

## VLB STARTER SYSTEM

- 3-VLB, 4-ISA Slots
- Intel DX2-66MHz Processor
- CPU Heatsink & Cooling Fan
- 8MB RAM, 256 Fast Write Back Cache
- 1.44MB Floppy Disk
- 420MB IDE Hard Disk
- VLB IDE Controller
- VLB SVGA Win. Accelerator 1MB RAM, 1280x1024
- 14" SVGA Monitor, 1024x768, .28dp N.I.
- Mini Tower Case, 101 KB & Hi-Resolution Mouse

66MHz Intel $1075 BEST BUY!

| | |
|---|---|
| NEW! 80MHz AMD | $1090 |
| NEW! 100MHz AMD | $1259 |

## HARDWARE

*HDD-IDE*

| | |
|---|---|
| 420MB Quantum | $175 |
| 540MB Seagate | $190 |
| 850MB Conner | $270 |
| 1.25GB Conner | $430 |
| 1.06GB Conner SCSI | $555 |
| 250/420 Tape Backup | $140/$165 |
| Dual 1.2 & 1.44 Floppy Drive | $85 |

*CONTROLLER*

| | |
|---|---|
| Adaptec 1542 ISA | $180 |
| Adaptec 2742 EISA | $250 |
| Adaptec 2940 PCI | $205 |
| VLB Enhanced IDE I/O | $29 |
| PCI Enhanced IDE | $39 |
| ISA IDE I/O | $20 |

*ADD-ON CARD*

| | |
|---|---|
| 14.4 Fax Modem | $65 |
| 14.4 Voice Fax Modem | $85 |
| 14.4 U.S. Robotics | $99 |

*VGA & MONITOR*

| | |
|---|---|
| Diamond Stealth 64 2/4MB VRAM | $295/$450 |
| ATi Mach 64 2/4MB VRAM | $300/$495 |
| Diamond Stealth 64 1/2MB DRAM | $145/$195 |
| VLB SVGA w/1MB | $69 |
| PCI SVGA w/1MB | $89 |
| 14" SVGA Monitor 1024x768, N.I. | $210 |
| 15" SVGA, 1280x1024, N.I., EPA | $299 |
| 17" MAG DX17F, .26dp, 1280x1024 | $599 |

## MULTIMEDIA WINDOWS

*SOUND CARD*

| | |
|---|---|
| 16Bit Mozart | $59 |
| SB 16 Multi CD | $75 |
| SB 16 SCSI | $115 |
| SB 32 Value Edition | $230 |
| SB AWE 32 Full Pkg. | $275 |

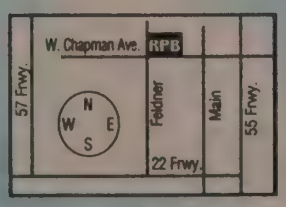
*CD ROM*

| | |
|---|---|
| 2x Panasonic | $115 |
| 2x Sony IDE CD ROM | $115 |
| 4x TEAC CD ROM | $230 |
| 4x Mitsumi IDE CD ROM | $199 |
| 3x NEC 510 SCSI | $250 |
| 4x Toshiba 3501 SCSI | $300 |
| 14 CD Title ('95 Grolier Encyclopedia, Atlas & Games) | $35 |
| 120 Watt Jumbo Speaker | $55 |

SAME DAY INSTALLATION AVAILABLE!

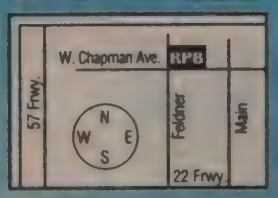
## FREE INSTALLATION w/PURCHASE OF SYSTEM! Otherwise Hourly Labor.

**RPB**
Computer Systems
1627 Chapman Ave., Orange, CA 92668
Tel: (714) 978-7430
Fax:(714) 634-2963




**SUPERIOR COMPUTER**
825 S. Primrose Ave. Ste. #B,
Monrovia, CA 91016
Tel: (818) 301-4255
Fax: (818) 301-4256

DISCOVER VISA MasterCard




Upgrades and custom configured available. Please call for details. Specialized in Repair and Upgrades. FREE Estimates. 1 day turnaround time. All systems carry a one year parts, five year labor warranty/72 Hour burn-in before shipping. Government & Corporate PO's Welcome. Price subject to change without notice. Not responsible for typographical errors. Visa, MasterCard, Discover and Check welcome!

# INTELLINOTE
## MULTI-MEDIA NOTEBOOK

**10.3" DUAL SCAN 640X480 WITH LOCAL BUS & WINDOW ACCELERATOR SIMULTANEOUS DISPLAY**

**LED INDICATOR:**

- Battery in use/Charging
- AC, DC and Low Battery Status
- HDD, FDD in use
- Caps Lock, Numbers Lock Scroll Lock
- PCMCIA in use

**CHOICE OF TWO TYPE II OR ONE TYPE III PCMCIA SOCKET:**

- Fax/Modem
- Network Adapter
- SCSI Card
- Hard Disk
- Memory Card

**16MM CENTER MICRO TRACK BALL**

## CCS DUAL SCAN

| | |
|---|---|
| 486DX2-66 4MB/340MB HDD | $1749 |
| 486DX2-66 8MB/540MB HDD | $1995 |
| 486DX4-75 4MB/540MB HDD | $1899 |
| 486DX4-100 4MB/540MB HDD | $1949 |

## CCS ACTIVE MATRIX

| | |
|---|---|
| 486DX2-66 4MB/340MB HDD | $2519 |
| 486DX2-66 8MB/540MB HDD | $2789 |
| 486DX4-75 8MB/540MB HDD | $2839 |
| 486DX4-100 8MB/340MB HDD | $2879 |

## PENTIUM DUAL SCAN

| | |
|---|---|
| P-90 8MB/340MB HDD | $3529 |

## PENTIUM ACTIVE MATRIX

| | |
|---|---|
| P-90 8MB/540MB HDD | $5152 |

COMPULINK AUTHORIZED RESELLER
IBM Business Partner
DigiBoard
COMPAQ AUTHORIZED RESELLER
AUTHORIZED RESELLER DPT
BusLogic
IBM Personal Printers by LEXMARK™
NANAO Authorized Dealer Distributed by CADLAX MICRO

### TERMS

- 14-Days money back guarantee
- All prices are C.O.D. cash
- Prices & configuration subject to change without notice.
- All returns must be as-new and send prepaid with RMA number
- One year warranty on parts
- Two years free labor warranty

yes It runs with NetWare
Microsoft Windows Ready to Run

## SPECIFICATIONS

- Upgradable: 486DX-33, DX2-50/66, DX4-75/100
- 4MB to 20MB/128KB BIOS Flash ROM
- PCMCIA Sockets: 2 Type II / 1 Type III
- 16mm Center Micro Trackball Mouse Built-in
- Internal Hard Drive 250/340/520MB
- 3.5" 1.44MB Floppy Drive
- 32-bit VLB Windows Accelerator w/1MB RAM
- 10.3" Dual Scan DSTN 640x480 Simultaneous 9.5" Active Scan TFT (Upgrade $775)
- NiMH Battery-up to 4.5hr
- Built in Serial Port, VGA Port, Bi-Directional Parallel Port, PS2 Keyboard Connector, External Speaker Jack, and Microphone Input Jack
- 85/86-Key PC/AT w/12 Function Keys Keyboard
- 10.9"W x 8.58"D x 1.75"H /Only 6.3lbs!
- Manufactured by Sceptre (OEM)
- 1 Year Warranty
- Available Accessories: Docking Station, External Battery Charger, Car Adapter

## CCS BEST BUY
### 486DX2-66Mhz PCI

256K Cache
8MB RAM
1.44MB Floppy Drive
PCI IDE Controller
540MB IDE Hard Drive
Medium Tower Case
Diamond Stealth PCI 2MB DRAM
15" Digital Control SVGA Monitor N-I
(1280x1024, .28dpi)
101 Enhanced Key Board, Serial Mouse

**$1249**

## MULTI-MEDIA UPGRADES

### CCS PACKAGE #1
### DOUBLE SPEED MULTI MEDIA

- Sony Double Speed CD-ROM
- Sound Blaster MCD Compatible Sound Card
- 80W Speakers
- 14 CD Software Titles

**...$230**

### CCS PACKAGE #2
### QUAD SPEED MULTI MEDIA

- Teac Quad Spin CD-ROM
- Sound Blaster MCD
- 112W Stereo Speakers
- 14 CD Software Titles

**...$335**

### TOSHIBA
### QUAD SPIN SCSI-II

**...$499**

## CCS
### SUPER MULTI-MEDIA
### VLB MASTERING SLOTS

2

486DX2-66Mhz
256K Cache
8MB RAM/540MB HD
15" Digital Control SVGA Monitor
(1280x1024, .28dpi) N-I
TEAC 1.44MB FD
VESA IDE FD/HD Controller
VESA SVGA Card w/1MB up to 2MB
101 Keyboard/3-Button Mouse
Mid-Tower Case
Double Speed CD-ROM
Sound Blaster MCD
Compatible Sound Card
80W Speakers 14 CD-titles

**$1379**

VISA

Computer Technology CCS 1987-1994

**Corporate Computer Solutions**
*9698 Telstar Ave., #303,*
*El Monte, CA 91731*
818-582-8013 Fax 818-582-8921

Trademarks or registered trademarks are property of their respective holders.

## CCS
### PENTIUM 90MHz
### INTEL NEPTUNE CHIPSET

3

Pentium Neptune Chipset
Intel CPU, 256K Cache
8MB RAM, 540MB IDE HD
1.44MB Floppy Drive
PCI High-Speed I/O
Medium Tower Case
15" Digital Control SVGA N-I Mtr.
ATI MACH 64 PCI w/2MB
101 Enhanced Key Board
Serial Mouse

**$1949**

## CCS
### PENTIUM WORKSTATION

Bug FREE P90 CPU

4

Pentium PCI Motherboard
Intel CPU, 256K Cache
8MB RAM, 540MB IDE HD
1.44MB Floppy Drive
PCI IDE Controller
Medium Tower Case
ATI MACH 64 PCI w/2MB
15" Digital Control SVGA N-I Monitor
101 Enhanced Key Board, Serial Mouse

**P-90 ...$1759**
**P-100 ...$1849**

# VALUE COMPUTING

## PENTIUM POWER

- **Intel Pentium** CPU
- **16MB RAM**, 256K Cache
- **540MB** IDE Hard Drive
- PCI **64Bit 2MB** Graphics Accelerator
- PCI **Enhence IDE** Controller Card
- **15" .28 SVGA** 1280x1024 N-I Monitor
- 1.44MB Floppy Drive
- 101 Enhanced Keyboard
- MS DOS 6.2 &WIN 3.11
- 2S, 1P, & 1G Port
- Mouse

intel inside pentium

**PENTIUM 66MHz $1755**
**PENTIUM 90MHz $2155**

## 486VLB EXTRA

- **EXTRA** SPEED AM 80 or 100MHz
- **3.3V Low Power CPU**
- **8MB RAM**, 256K Cache
- **540MB** IDE Hard Drive
- **VLB Graphics** Accelerator with 1MB
- **VLB Enhence** IDE Controller
- **14" SVGA**, N-I, .28dpi Monitor
- 1.44MB Floppy Drive
- 101 Enhanced Keyboard
- MS DOS 6.2 & WIN 3.11
- 2 S, 1P, & 1G Port
- Mouse

**$1155**

**VLB486DX4 100 $1295**
16MB RAM Upgrade Add $250

## 486-66 MULTIMEDIA

- **IBM Made VESA Local Bus MainBoard**
- **486SLC2 66MHz**, 16K Internal Cache
- **4MB RAM**, 64K External Cache
- **420MB** IDE Hard Drive
- **VLB Graphics** Accel. with 1MB
- **VLB 32 Bit IDE** Hard Drive Controller
- **14" .28 SVGA N.I.** Color Monitor
- 1.44MB Floppy Drive
- 101 Enhanced Keyboard
- 2S, 1P, 1G Port
- Mouse
- **2X Multimedia Kit*** (See Below)

IBM

**$999**

## SAVE ON DISKDRIVES

| | |
|---|---|
| 210MB IDE... | $155 |
| 420MB IDE... | $185 |
| 540MB IDE... | $210 |
| 850MB IDE... | $295 |
| 1GB IDE, 10MS... | $395 |
| 1GB SCSI-2, 9.5MS 5YR. | $525 |
| QUANTUM 1.4GB, SCSI-2, 9.5MS | $CALL |
| QUANTUM 2.1GB, SCSI, 9.5MS | $1,025 |
| MICROPOLIS 1GB SCSI2/IDE, 8.5MS | $595 |
| MICRLIS 1.7GB, SCSI2/IDE, 10MS | $935 |
| 3GB, 4GB, 9GB Fast Wide SCSI... | $call |
| CONTROLLER | |
| IDE W/ IO ISA... | $11 |
| IDE W/ IO VLB... | $19 |
| ENHANCE IDE W/ FAST IO ISA... | $35 |
| ENHANCE IDE W/ FAST IO VLB... | $45 |
| ENHANCE IDE W/ IO PCI... | $35 |
| ENHANCE IDE W/ Fast IO PCI... | $35 |
| PCI SCSI-2 NCR... | $75 |
| PCI SCSI-2 ADAPTEC 2940 KIT... | $225 |

## SAVE ON VIDEO

| | 1MB | 2MB | 4MB |
|---|---|---|---|
| ISA 1MB SVGA | $55 | $N/A | $N/A |
| Trident CXI9440 VLB | $75 | $115 | $N/A |
| PCI Accelerator | $110 | $165 | $N/A |
| Diamond Stealth 64 | $135 | $185. | $N/A |
| S3 864 Dram Accelerator, PCI or VLB | | | |
| Diamond Stealth 64 | $N/A | $275 | $395 |
| S3 964 Vram Accelerator, PCI | | | |
| Diamond Viper SE | $N/A | $285 | $CALL |
| Spider Graphic PCI 64 | $115 | $165 | $275 |
| CL5434 64Bit Dram Accelerator PCI or VLB | | | |
| Spider Graphic PCI 64 | $N/A | $235 | $375 |
| S3 964 64Bit Vram Accelerator PCI or VLB | | | |

**We are the Spider Graphics distributor please give us a call for quantity pricing .**
**Please Call For ATI, #9, Matrox Video Board ...**

**MONITOR SPECIAL !!!**
**Samrock** 17" .28Dpi, Flat, 1280x1024
Low Radiation, Digital ...**$555**

## MULTIMEDIA KITS

**W/ SYSTEM PURCHASE ONLY**

**•2X KIT ...$199**
MediaVision 16bit Sound Card
Double Speed CD-ROM (Sony)
Amplified Stereo Speakers
14 CD Titles*

**•4X KIT ...$295**
MediaVision 16bit Sound Card
Quad Speed CD-ROM
(Mitsumi 600kb, 195ms)
Amplified Stereo Speakers
14 CD Titles*

**•4X SCSI-2 KIT ...$445**
SoundBlaster 16 SCSI-2 Sound Card
Quad Speed CD-ROM
(Toshiba 3501, 600kb, 125ms)
Amplified Stereo Speakers
14 CD Titles*

*** 14 CD Titles:** Compton 95 Inter Ency., U.S & World Atlas, Mavis Typing Tutor, ChessMaster 3000, 9 CD-Games Robocop 3D, F29, PushOver etc.

## Save On Motherboards

| Motherboards with CPU | 0MB | 4MB | 8MB | 16MB |
|---|---|---|---|---|
| VLB 486DX/2 66 (Cyrix) | 195 | 335 | 465 | 655 |
| VLB 486DX/2 80 (AMD) | 245 | 385 | 515 | 695 |
| VLB 486DX4 100 (AMD) | 325 | 455 | 595 | 795 |
| PCI Pentium 66 (Intel) | 495 | 0 | 775 | 955 |
| PCI Pentium 90 (Intel) | 855 | 0 | 1125 | 1395 |
| Micronic / Intel P5-90 Board | 1025 | 0 | 1295 | 1595 |

## Save On Standard SIMMs

| | | | |
|---|---|---|---|
| 1MB x 9 (3 Chip) | 38.50 | 2MB (72PIN) | 85.00 |
| 1MB x 9 (9 Chip) | 42.00 | 4MB (72PIN) | 155.00 |
| 4MB x 8 | 125.00 | 8MB (72PIN) | 295.00 |
| 4MB x 9 | 139.00 | 16MB (72PIN) | 595.00 |
| 16MB x 9 | CALL | 32MB (72PIN) | 1256.00 |
| 256 x 36 | 59.00 | 16MB x 36 | CALL |

## MEMORY UPGRADES

brother Canon COMPAQ DELL SHARP ZENITH

**OUR MEMORY UPGRADES ARE**
MANUFACTURED BY
Kingston TECHNOLOGY CORPORATION
DESKTOPS • NOTEBOOKS • PRINTERS

AST Acer IBM NEC Panasonic Office Automation Apple® Macintosh HEWLETT PACKARD LEXMARK TOSHIBA EPSON OKIDATA

# COMPUTiX

3480 W. Warner Ave. Suite. D, Santa Ana, CA 92704

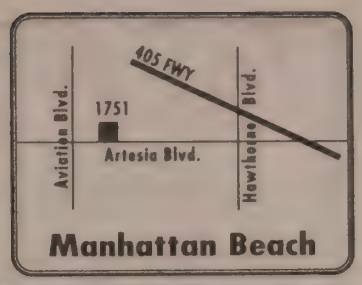
**Sales: (714) 540-5131**
**Technical: (714) 540-6217**
**FAX: (714) 540-5139**

VISA MasterCard

All Brand Names And Trademarks Are of Their Respective Companies • Prices, Availability, And Specifications Subject to Change Without Notice

# KB Computers & Technology

1751 Artesia Blvd. #B
Manhattan Beach
CA 90266
Phone: (310) 798-7332
Fax: (310) 798-8939




**Business Hours:** Mon–Fri 9 a.m. to 6 p.m. Sat–Sun 10 a.m. to 4 p.m.

**All systems come with a one year warranty, extended support and service option is available on request.**

## Multimedia Kit

Double Speed CD ROM, 16 Bit Sound Card, Joystick, 4+4 Watts Speakers, 1 Game + 6 CD Title. ..... **Only $219.00**
Sound Blaster Discovery 16 ..... $239.00

### CD ROM & SOUND CARDS

Sony CD Double Speed ..... $120.00
Panasonic CD Double Speed ..... $135.00
Quad Speed 4x, IDE ..... $265.00
Sound Blaster 16 MCD ..... $109.00
Sound Blaster 16 SCSI ..... $149.00
Sound Blaster AWE/32 ..... $269.00
Sound Blaster 32 ..... $265.00

## Network Cards

16Bit 2in1 NE-2000 Comp ..... $ 39.00
16Bit NE-2000 PCMCIA ..... $189.00
32Bit 3in1 VLB w/driver ..... $199.00

## Monitors

12" Monchorome T.TI ..... $ 89.00
12" Monchorome VGA ..... $119.00
14" VGA Color ..... $169.00
14" SVGA .39 1024x768 ..... $189.00
14" SVGA .28 NI 1024x768 ... $209.00
15" SVGA .28 NI 1280x1024 .. $276.00
17" SVGA .28 NI 1280x1024 .. $568.00
17" SVGA .28 1680x1280 .... $689.00

### *Viewsonic Monitors*

V4E 14"SVGA .28 NI ..... $252.00
V15E 15" .28 NI Green ..... $345.00
V15 15" .27 NI 1 280X1024 .. $425.00
V17E 17".28 NI ..... $689.00
V17 17" .27 NI 1600X1280 ... $889.00

### *NEC*

NEC 3FG 15" ..... $399.00
NEC 3FGE 15" ..... $449.00
NEC 4FGE 15" ..... $499.00
NEC 5FG 17" ..... $999.00

## Hard Drives

260 MB IDE ..... $159.00
405 MB IDE ..... $179.00
420 MB IDE ..... $183.00
540 MB IDE ..... $205.00
540 MB IDE MAXTOR ..... $215.00
540 MB SCSI QUANTUM ..... $245.00
700 MB IDE ..... $289.00
1.0 GB W.D. IDE ..... $439.00
1.0 GB CONNER SCSI ..... $495.00
1.0 GB QUANTUM ..... $495.00

## Fax/Modems

9600/2400 Fax Modem ..... $ 28.00
14400 Fax Modem ..... $ 57.00
14400 Fax/Modem/Voicemail ... $ 95.00
14400 Fax Modem (External by Cakcom) $139.00
28.8 Fax/Modem Internal ..... $135.00

## 486 DX2-66 Computer

**with Multimedia Super Package**
**UL & FCC Class 2 Approved.**

**3 years labor & 1 year parts warranty**

- 486 DX2-66 VLB Intel CPU with 256 cache
- Pentium Over Drive ready Zif Socket
- 420 MB IDE HD
- 1.44 MB FD
- 4MB RAM
- SVGA NI .28 14" Color Monitor
- Mouse
- 101 Keyboard
- Double Speed Multi-Session CD ROM
- 6-CD Titles including Encyclopedia
- VLB I/O IDE Card 2HD, 2FDD, 2S, 1P, 1G
- SVGA VLB 1MB Card 1024x768

## Mother Boards with CPU & Cache

ISA 386-SX40 ..... $ 59.00
ISA 386-DX40 128K Cache ..... $ 95.00
ISA 486-33 TI CPU OK Cache ..... $ 95.00
ISA 486-DLC 40 Mhz, 128K Cache ..... $165.00
VLB 486-DLC 40 Mhz w/NPU 128 Cache ..... $189.00
VLB 486-DX40 Mhz, 256K Cache ..... $239.00
**VLB 486-DX 33 Mhz Intel CPU, 256K Cache ..... $248.00**
**VLB 486-DX2-66 Mhz Intel CPU, 256K Cache ..... $279.00**
VLB 486-SX25 Mhz Intel CPU, OK Cache ..... $155.00
VLB 486-SX33 Mhz Intel CPU, OK Cache ..... $179.00
VLB/PCI 486-DX2-66 Intel CPU, 256K Cache ..... $335.00

| Pentium System Boards | w/CPU | w/o CPU |
|---|---|---|
| 586-60 Intel, 4 PCI, 256K | $ 638.00 | $229.00 |
| 586-66 Intel, 4 PCI, 256K | $ 698.00 | $229.00 |
| 586-90 3-PCI, OPTI AMI, 256K | $829.00 | $249.00 |

**IBM System Boards w/CPU & NPU**

IBM 486SLC2-66, VESA, OPTI, 64K ..... $219.00
IBM 486SLC2-66, ISA, OPTI, 64K ..... $199.00

## Simms & Memeory

256K Simms 80ns ..... $ 11.00
1Meg Simms 70ns 1x3 ..... $ 37.00
1Meg Simms 70ns 1x2 ..... $ 35.00
4Meg Simms 70ns 1x9 ..... $149.00
1Meg Simms 70ns 72pin ..... $ 52.00
1Meg Sipps 70ns 30pin ..... $ 39.00
2Meg Simms 70ns 72pin ..... $ 89.00
4Meg Simms 70ns 72pin ..... $149.00
8Meg Simms 70ns 72pin ..... $279.00
16Meg Simms 70ns ..... $495.00

## Printers

HP540 ..... $ 272.00
HP560C ..... $ 469.00
HP4P ..... $ 915.00
HP4Plus ..... $1359.00
HP4L ..... $ 619.00
Oki 400 ..... $415.00
Oki 400E ..... $510.00
Panasonic P1150 ..... $129.00
Epson Stylus 800 ..... $255.00
Canon BJC-600 ..... $529.00

**Please call for latest prices.**

## CPU

586-90 Intel ..... $589.00
586-66 Intel ..... $494.00
586-60 Intel ..... $413.00
486DX4-100 Intel ..... $495.00
486DX2-66 Intel ..... $189.00
486-DX33 Intel ..... $149.00
486-SX33 Intel ..... $ 85.00
486-DX33 Cyrex ..... $138.00

## Accessories

Mini Tower Case w/ps ..... $ 37.00
Mid Tower Case w/ps ..... $ 54.00
Desktop Case w/ps ..... $ 46.00
Full Tower Case w/ps ..... $ 70.00
Key Board 101 BTC ..... $ 17.00
Key Board Focus 2001 ..... $ 39.00
Key Board Focus 8000 ..... $ 45.00
Mouse Generic ..... $ 9.00
Microsoft Mouse 2 button ..... $ 39.00
1.2 MB FD 5" ..... $ 45.00
1.44 MB FD 3" ..... $ 39.00
120 MB Tape Backup ..... $129.00
250 MB Tape Backup ..... $149.00

## I/O Cards

16Bit 2S,1P,1G ..... $ 13.00
16Bit 2S,1P,1G,2HD,2FD ..... $ 16.00
VLB 2S,1P,1G,2HD,2FD ..... $ 23.00
PCI SCSI CARD ..... $99.00
VLB 6360 Adaptec SCSI ..... $ 99.00
VLB AT I/O&IDE 4+4 Suprt 2.88 HI/Spd. $ 55.00
VLB AT I/O&IDE w/OK Cache Promise .. $149.00
PCI I/O IDE Card ..... $ 39.00
PCI IDE Card ..... $ 29.00
VLB Caching Controller ..... $137.00
Intel PCI IDE Card With Cable ..... $ 39.00

## Video Cards

ISA VGA 256k Video Card ..... $29.00
ISA VGA 512k Video Card ..... $39.00
ISA VGA 1MB Video Card ..... $59.00
VLB SVGA 1MB 1024x768 ..... $69.00
VLB SVGA S3 CHIP 1024x768 ... $85.00
PCI/VLB Diamond Stealth 64bit/2MB DRAM .... $185
PCI/VLB Diamond Stealth 64bit/2MB VRAM .... $279
Diamond Viper SE VLB /2MB VRAM ..... $299
PCI/VLB Kelvin 64 Orchid /1MB ..... $139
PCI/VLB Pro Turbo /2MB VRAM ..... $286
PCI/VLB Pro Turbo /4MB VRAM ..... $489
PCI/VLB Graphics Ultra Pro /2MB VRAM ..... $250

MasterCard VISA

**Financing is Available.** (OAC)
**All Prices are Cash/Check**

*Prices subject to change without notice. Not Responsible for typos. All product names are trademark of their respective companies.

# Resources

# Calendar Of Events

## Conferences, Shows, Special Events

### March

**March 4–5 American Computer Mega Show.** CSU, Northridge. American Mega Shows. Call: (818)961-3782.

**March 5 Computer Show And Sale.** Scottish Rite Center, San Diego. MarketPro Shows. Call: 1-800-708-7555.

**March 7–9 Documation '95 Conference And Expo.** Long Beach. Graphic Communications Association. Call: 1-800-865-6493.

**March 11–12 Computer Show And Sale.** Ventura Fairgrounds. MarketPro Shows. Call: 1-800-708-7555.

**March 11–12 Mall Computer Show And Sale.** Buena Park Mall. Derek M. Borthwick Show Productions. Call: (818)913-4046.

**March 12 Computer Show And Sale.** Antelope Valley Fairgrounds, Lancaster. MarketPro Shows. Call: 1-800-708-7555.

**March 12 Computer Show And Sale.** Fresno Fairgrounds. MarketPro Shows. Call: 1-800-708-7555.

**March 14–16 Mactivity'95 Conference And Expo.** Boston. Mactivity Inc. Call: 1-800-798-2928 or email: *info@mactivity.com* .

**March 14–16 New Media Expo.** Los Angeles. The Interface Group. Call: (617)449-6600.

**March 14–16 South By Southwest Multimedia Festival.** Austin, TX. SXSW Multimedia. Call: (512)467-7979.

**March 14–18 Technology And Persons With Disabilities Conference.** Los Angeles. Center on Disabilities. Call: (818)885-2578, email: *ltm@csun.edu* .

**March 15 Entertainment Technologies:**

## MARCH 7–9

### DOCUMATION '95 CONFERENCE & EXPO

**LONG BEACH CONVENTION CENTER, LONG BEACH**

The Second Annual Documation '95 Conference & Expo, with more than one hundred trade show exhibits, will feature the entire range of document management technology and solution strategies. Exhibitors representing all aspects of the emerging document management industry will show their established solutions to existing corporate enterprise information requirements alongside new applications and technology. The conference will offer technical information, valuable case studies, expert solutions, and problem-solving techniques. Documation '95 is sponsored by the Graphics Communications Association and Publishing Technology Management; call 1-800-865-6493 for more information.

## MARCH 19

### AMERICAN COMPUTER MEGA SHOW

**CARSON CENTER, SOUTH BAY**

American Mega Show presents the American Computer Mega Show. There will be over one hundred companies selling their latest products, including complete systems, affordable notebooks, multimedia, printers, disk drives, and computer accessories with up to a 50% discount. Also choose from a huge selection of business, games, and educational software. The show takes place at the Carson Center in the South Bay from 10 am to 5 pm. For more information call (818)961-3782.

## MARCH 25–26

### COMPUTER MARKETPLACE

**FAIRPLEX EXPO CENTER, POMONA**

Computer Marketplace is devoted to bringing the latest innovations in computer technology to the public. Hundreds of knowledgeable computer retailers and businesses demonstrate their products and service your needs. The huge inventory includes multimedia systems, notebook computers, modems, CD-ROM drives, printers, scanners, sound cards, software, accessories, and more—all at low, wholesale prices. Computer Marketplace has expanded into two buildings at the Fairplex Expo Center. It is open from 10 am to 5 pm. Call 1-800-800-5600 for more information.

**The Cerritos Project Presentation.** Santa Monica. LA Chapter of the American Society for Information Science. Call: Karen Flanders by March 8, (213)243-9236.

**March 15–16 SoftEx Accounting And Finance Expo.** San Francisco. KPMG Peat Marwick and CFO. Call: 1-800-807-6389.

**March 18 Computer Show And Sale Expo.** Panorama City. Bonanza Show Productions. Call: Paul, (415)595-1053.

**March 19 American Computer Mega Show.** Carson Center, South Bay. American Mega Shows. Call: (818)961-3782.

**March 19–23 Supercom With ICA Expo.** Anaheim. Smith & Shows. Call: 1-800-422-4636.

**March 25–26 American Computer Mega Show.** Pasadena Convention Center. American Mega Shows. Call: (818)961-3782.

**March 25–26 Computer Marketplace Show.** Fairplex Expo Center, Pomona. National Productions. Call: 1-800-800-5600.

**March 25–26 Computer Show And Sale.** Del Mar Fairgrounds. MarketPro Shows. Call: 1-800-708-7555.

**March 25–26 CompuWest Computer Show And Sale Expo.** Los Angeles. K&M International. Call: (213)462-6775.

**March 26 ACP Computer Swap Meet.** 1310 E. Edinger, Santa Ana. ACP. Call: (714)558-8813.

**March 27–31 NetWorld + InterOp Conference.** Las Vegas. Smith & Shows. Call: (415)578-6900.

**March 28–30 Business Computer Show.** Anaheim. International Spectrum. Call: (619)578-3152.

### April

**April 1 L.A.S.F.S. Virtual Reality Showcase.** North Hollywood. *StarQuest* Magazine.

# Computer MARKETPLACE

Computer Trade Show
With Wholesale Prices

***The Traveling Mall That Has It All!***

There is no other place where you can find such a huge inventory of computer products all under one roof AND at low, wholesale prices! Hundreds of knowledgeable computer retailers and businesses each demonstrating their products and paying close attention to your needs.

**March 11 & 12**
Saturday & Sunday
**SANTA BARBARA** Earl Warren Showgrounds
Take Highway 101 to the Las Positas Exit. Follow the signs to the fairgrounds.

**March 25 & 26**
Saturday & Sunday
**POMONA** Fairplex Exposition Center
Exit Highway 10 at Fairplex Drive. Go north to McKinley Avenue, turn right.
Turn left on White Avenue to Gate 14.

**April 1**
Saturday
**RESEDA** Sherman Entertainment Center
From the 101 Freeway take the Reseda offramp, turn left (east) to Sherman Way and turn right. Go one block to Canby Street. 18430 Sherman Way.

**April 2**
Sunday
**BUENA PARK** Sequoia Conference Center
Take the Beach Blvd. exit off the 91 Freeway. Go one block north to 7530 Orangethorpe.

**April 8 & 9**
Saturday & Sunday
**POMONA** Fairplex Exposition Center

**May 6 & 7**
Saturday & Sunday
**SANTA BARBARA** Earl Warren Showgrounds

**May 13 & 14**
Saturday & Sunday
**POMONA** Fairplex Exposition Center

**June 3 & 4**
Saturday & Sunday
**POMONA** Fairplex Exposition Center

All Shows
Open to the Public
10:00 A.M. TO 5:00 P.M.

***CONSIGNMENT TABLE***

***300 EXHIBITS** at the **POMONA SHOWS***

Admission
Pomona: $7.00
All others: $5.00

National Productions Inc

**(408) 778-5200 or 800-800-5600**
Fax# (408) 779-1374

# Your Computer Super Source!

## PCI SCSI-3 Super Star

- Intel Pentium Processor
- 8MB RAM 256K Fast bCache
- 1GB **SCSI-3** Hard Drive
- 1.44MB High Density Floppy
- PCI **Adaptec 2940W SCSI-3** Controller
- PCI Diamond Stealth 64 w/ 2MB
- 17" MAG DX 17 SVGA Color Monitor .26 Dot Pitch-Flat Screen-1280X 1024 NI.
- 2 Serial/ 1 Parallel/ 1 Game Ports
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**Pentium 100 $3249**
**Pentium 90 $3049**
**Pentium 60 $2849**

## PCI Pentium Multimedia Star

- Intel Pentium Processor
- 8MB Ram 256K Fast Cache
- 850MB **Enhanced IDE** Hard Drive
- 1.44MB High Density Floppy
- PCI **Enhanced IDE** Controller
- PCI Diamond Stealth 64 w/ 2MB
- 17" MAG DX 17 SVGA Color Monitor .26 Dot Pitch-Flat Screen-1280x1024 NI.
- 2 Serial/ 1 Parallel/ 1 Game Ports
- Quad Speed CD ROM (4x)
- 16 Bit Sound Card
- Amplified Stereo Speakers
- 4 CD Titles
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**Pentium 100 $2949**
**Pentium 90 $2749**
**Pentium 60 $2549**

## PCI Pentium Multimedia Special

- Intel Pentium Processor
- 8MB Ram 256K Fast Cache
- 540MB **Enhanced IDE** Hard Drive
- 1.44MB High Density Floppy
- PCI **Enhanced IDE** Controller
- PCI Graphics Accelerator w/ 1MB
- 15" SVGA Color Monitor .28 Dot Pitch Flat Screen-Low Radiation-Non Interlaced
- 2 Serial/ 1 Parallel/ 1 Game Ports
- Double Speed CD ROM
- 16 Bit Sound Card
- Amplified Stereo Speakers
- 4 CD Titles
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**Pentium 100 $2229**
**Pentium 90 $2029**
**Pentium 60 $1829**

## PCI Pentium Special

- Intel Pentium Processor
- 8MB Ram 256K Fast Cache
- 540MB **Enhanced IDE** Hard Drive
- 1.44MB High Density Floppy
- PCI **Enhanced IDE** Controller
- PCI Graphics Accelerator w/ 1MB
- 14" SVGA Color Monitor .28 Dot Pitch Low Radiation-1024x768 NI.
- 2 Serial/ 1 Parallel/ 1 Game Ports
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**Pentium 100 $1969**
**Pentium 90 $1769**
**Pentium 60 $1569**

## 486 VLB Multimedia Star

- 486 DX 2/66 Mhz
- 8MB Ram 256K Fast Cache
- 540MB **Enhanced IDE** Hard Drive
- 1.44MB High Density Floppy
- 32 Bit VLB HD/FD Controller
- 32 Bit VLB Graphics Accelerator w/ 1MB
- 15" SVGA Color Monitor .28 Dot Pitch Flat Screen-Low Radiation-Non Interlaced
- 2 Serial 1 Parallel/ 1 Game Ports
- Double Speed CD ROM
- 16 Bit Sound Card
- Amplified Stereo Speakers
- 4 CD Titles
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**$1499**

## 486 VLB Special

- 486 DX 2/66 Mhz
- 4MB Ram 256K Fast Cache
- 420MB IDE Hard Drive
- 1.44MB High Density Floppy
- 32 Bit VLB HD/FD Controller
- 32 Bit VLB Graphics Accelerator w/ 1MB
- 14" SVGA Color Monitor .28 Dot Pitch Low Radiation-1024x768 NI.
- 2 Serial/ 1 Parallel/ 1 Game Ports
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Case
- **Microsoft** Dos 6.22/ Windows 3.11

**$999**

**Government**
**Business**
**School**
**P/O Welcome**

**Business Leasing Available**

*Call for Upgrade Options & CD Titles*

MICROSOFT WINDOWS READY-TO-RUN

BBB

IDE

*Custom Configurations - Our Specialty!*

**C.S. Source** **1-818-330-6863** FAX:818 330-6807

15338 E. Valley Blvd.
City of Industry, CA 91746

Mon-Fri (9:00am-6:00pm) • Sat (10:00am-4:00pm)

Prices Subject to Change Without Notice.

# Resources

## Calendar Of Events *continued...*

Call: (818)764-8494.

**April 1–2 American Computer Mega Show.** CSU, Northridge. American Mega Shows. Call: (818)961-3782.

**April 1–2 Mall Computer Show And Sale.** Santa Fe Springs Mall. Derek M. Borthwick Show Productions. Call: (818)913-4046.

**April 2 Computer Show And Sale.** Oxnard Community Center. MarketPro Shows. Call: 1-800-708-7555.

**April 6–7 Digital Publishing Symposium.** New York City. Institute for International Research. Call: 1-800-345-8016.

**April 6–7 Technology Marketplace '95.** San Francisco. Advertising Age's Business Marketing. Call: 1-800-243-3238.

**April 8 Computer Show And Sale.** Fresno Fairgrounds. MarketPro Shows. Call: 1-800-708-7555.

**April 9 N.O.C.C.C. Computer Fair And Swap Meet.** Anaheim Marketplace. North Orange County Computer Club. Call: (714)521-6915.

**April 10–13 Internet World 95 Conference And Expo.** San Jose. Mecklermedia. Call: 1-800-632-5537 or email: *iwconf@mecklermedia.com* .

**April 15 Computer Show And Sale Expo.** Panorama City. Bonanza Show Productions. Call: Paul, (415)595-1053.

**April 15–16 American Computer Mega Show.** Carson Center, South Bay. American Mega Shows. Call: (818)961-3782.

**April 18–21 Folio:West Conference And Expo.** Los Angeles. *Folio:* magazine. Call: 1-800-927-5007.

## Classes, Seminars, Workshops

### March

**March 6 Windows 95 Systems II Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 6–10 UNIX Kernel Internals Class.** Los Angeles. UCLA Extension. Call: (310)825-1047.

**March 7–8 Basic Mac Skills IV Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 10 Interactive Multimedia Programs Open House.** Los Angeles. UCLA Extension. Call: (213)206-1422.

**March 10–12 Basic Electric Image Tools Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 10–13 Multimedia Intensive Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 13 Open GL Programming 1 Class.** Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

**March 13–15 Basic Desktop Video With Premiere II Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 15 Certified Software Manager Seminar.** San Diego. Software Publishers Association. Call: Becky Howland, (202)452-1600 ext. 367.

**March 18–19 Advanced Desktop Video With Premiere Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 20 Intro To IRIX Class.** Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

*continued on page 233*


HOT MEGA SHOWS

AMERICAN COMPUTER Mega SHOW

Up to 150 Exhibits for our Mega Shows
The Most POWERFUL Shows in Town
The latest PC systems, Notebooks, Multi-Media, Boards, Laser Printers
Fax Modems, Disk Drives, Softwares, Books, Accessories, and more..

MEGA Savings - Lower Than Mail Order Prices - Up to 50% Off Retail

Mar 4-5 Sat & Sun 10 - 5PM — Cal State Northridge, 18111 Nordhoff Street, Northridge (In Student Union)
HOT Show Mar 19 Sunday 10 - 5PM — SOUTH BAY: Carson Center, 801 E. Carson Street, Carson (corner of Carson & Avalon)
HOT Show Mar 25-26 Sat & Sun 10 - 5PM — PASADENA Convention Ctr, 300 E. Green Street, Pasadena
Apr 1-2 Sat & Sun 10 - 5PM — Cal State Northridge
Apr 15-16 Sat & Sun 10 - 5PM — SOUTH BAY: Carson Center
Home of the new P.Y.R.A.M.I.D.
Apr 29-30 Sat & Sun 10 - 5PM — Cal State LONG BEACH, 1250 Bellflower Blvd., Long Beach
May 6-7 Sat & Sun 10 - 5PM — Cal State Northridge

AMERICAN MEGA SHOWS 818-961-3782 Fax: 818-961-0933

$1 OFF COUPON | FREE PARKING Except Pasadena Show



BONANZA SHOW PRODUCTIONS PRESENTS THE

COMPUTER SHOW & SALE EXPO

PANORAMA
CITY SWAP MEET BUILDING
Saturday, March 18, 1995
Saturday, April 15, 1995
14650 PARTHENIA, PANORAMA CITY, CA

FREE PARKING

DIRECTIONS: From the Hollywood Freeway (170) take the Roscoe Blvd. exit. West on Roscoe to Van Nuys Blvd. Right (North) on Van Nuys Blvd. to Parthenia.

From the San Diego Freeway (405) take the Roscoe Blvd. exit. East on Roscoe to Van Nuys Blvd. Left (North) on Van Nuys Blvd. to Parthenia.

SHOW HOURS: 10AM- 5PM

$1.00 OFF WITH THIS AD!
REGULAR ADMISSION $5.00.

CHILDREN 12 & UNDER FREE COPIES OK
ONE DISCOUNT PER PERSON
FOR INFO CALL: 1.415.595.1053 MTSC

# User Group Network

## BULLETIN BOARDS

### MULTIZONE

**1st Centaurian BBS.** (714)857-6453, 738-5068, 972-8966; (818)789-4237, 330-2322, 246-3979, 346-6626, 280-4854; (909)468-0621. 14,400. 50 lines. 18 CD-ROMs, multi-user chat, online games. Free trial. Sysop: Brenda Furman. [Exp. #136.]

**4Next GT BBS.** (310)420-4788, 529-7452; (714)956-4698, 559-4669, 831-9043; (818)330-7151; (909)592-9833. 8-N-1, 24 hrs., up to 28,800. 72 lines. Internet, FidoNet, chat, games, CD-ROMs, and more. Free trial. Sysop: Chris Eden. [Exp. #135.]

**Annex! BBS.** (818)779-5600. 8-N-1, 1200–14,400. 98 lines. Games, files, chat, full Internet access, more! Local numbers for SoCal. Sysop: Gregory Gooden. [Exp. #136.]

**Asia America BBS.** (310)575-3534; (818)284-4519, 989-2041. 8-N-1, 2400/9600/14,400. Focus on Pacific Rim economy, cultural and business exchanges. Free. Sysop: Bob F. Howard. [Exp. #136.]

**Atlantis, The Lost BBS.** (714)256-1360, 828-6459; (818)859-6300, 579-4143, 798-4007. 2400–16,800. RIPterm, multiline chat, MajorMud, four-person Doom, forums, and fun. Sysop: Ron DeRuyter. [Exp. #135.]

**Aussie BBS.** (310)425-5710, 835-4800; (714)670-6500, 537-4300, 572-8800; (818)537-5005, 961-1700. 18 14,400 lines. 35,000+ files, TradeWars 2002, games, Internet, RIP support. Free trial. Sysop: Mike Szabados. [Exp. #136.]

**The Castle.** (213)293-0070, 936-9951; (818)637-8339, 794-0302, 985-6075. 14,400. 50 lines. MUDs, games, chat, 20GB library, Internet, and more! Free trial. Sysop: Steve de Mena. [Exp. #134.]

**Compu-Net BBS.** (310)822-0038, 544-4095; (818)782-3623. Internet access. CompuScans, CD-ROMs, dating, adult, windows, IBM, Mac. [Exp. #134.]

**Digital Excursion.** (213)874-9895; (818)951-9377, 951-9477. 24 hrs., 28,000. Offers graphical interface for Mac/Windows; CD-ROMs, OneNet. Free trial. Sysop: Nathaniel Lord. [Exp. #134.]

**Easy Street.** (714)778-5473, 528-3771, 229-9859; (909)590-4307. 14,400. 42 lines. Full Internet service, 16GB files, games, chat, news. [Exp. #136.]

**EDEN—The Electronic Garden.** (310)421-2420; (714)548-1900, 530-6335. 24 hrs., 14,400. 32 lines. Adults only "playground," featuring chat, games, email, forums, files, and fun. Sysop: Daniel Vesely. [Exp. #136.]

**KBBS Los Angeles.** (213)725-3047; (310)558-0145; (805)520-7323; (818)886-0872. 300– 28,800. 68 lines. 30GB shareware, adult; chat, full Internet, Usenet, coffee meets. Free trial. [Exp. #134.]

**Korea America Online.** (213)962-3634, (714)449-9373. 1200–14,400. 16 lines. Bilingual, Korean programs, information, chat, BBS in Korea list. $10/mo., $80/yr. Sysop: Wayne Jeong. [Exp. #136.]

**LA Online.** (213)936-1160; (310)372-4050, 445-0633; (818)577-2131. 8-N-1, 1200–14,400. World, national, and local news; calendar; movie times; graphical with software. Always free. [Exp. #136.]

**Miller's Party Board.** (213)727-0251, 569-9191; (310)815-0117, 212-3469, 929-4304; (714)739-1060, 537-4436; (805)583-3142; (818)879-1333, 700-0627, 240-8296, 769-2302, 577-5880, 961-2458. 14,400. 32 lines. Chat, live games, 4GB library, pub areas, WorldLink, and more. 14-day free trial. Sysop: Jack Stern. [Exp. #134.]

**Modemboy BBS.** (310)659-7000, 417-5157; (818)846-3000, 996-7900. Gay/bi/curious? Free chat, instant access, 18+, local events, campy fun. [Exp. #136.]

**Modem Butterfly's BBS.** (310)841-6900, 767-1010, 421-9231; (714)828-5500; (805)581-0700; (818)842-6900, 787-6900, 454-1919, 887-7900. Intelligent fun, good ratio of women, local events, contests, 1GB library. Instant access. Sysop: Karen Zoldan. [Exp. #136.]

**Prism.** (310)799-0380; (714)454-9242, 638-7249, 642-6256. 8-N-1, 24 hrs., 300–28,800. 32 lines. 4.5GB, Internet, MajorNet, TradeWars 2002, adult areas, social events. Instant access. [Exp. #136.]

**Quest Online.** (714)693-2480, 649-2574; (909)371-6751. Thousands of hot GIFs, Asian girls/gay section, chat, mail. [Exp. #136.]

**Southland BBS.** (213)962-8191, (818)793-9108. 14,400. Internet email, Usenet newsgroups, Linux, chat/MUD,

LEGEND Graphics Online
SuperVGA Photo Images
Adult GIF's, MoviePICs
Download Computer Graphics of tomorrow, today!
Nation's One Stop Graphics BBS
Modem: (909) 689-9229
(NO per min./hrly fees)
VISA MasterCard AMEX

The Motherboard
44 Lines Social BBS, 5 Gig library w/CD-ROMS, Interactive multi-player games.
Fidonet Access. Noise free digital lines. 2-week Free Trial!
...A Whole New World Online 1-800-862-3003

Internet
28.8 kbps. $29.95. No setup fee.
- A Standard Account offers you the whole power of the Internet with a **full SLIP/PPP Internet connection**—100 hrs./month for $29.95.
- A Taste of the Internet is just $9.50 a month for 4 hours of **full Internet access.**
- Publish your information on our T1-connected **World Wide Web** server.
- Never a setup fee for Standard, Taste, or Web services.
- Ask us about network connections via leased lines or Frame Relay.

For voice information, call 818.858.9261
Lightside
818.858.9261 voice
818.858.8982 fax
818.858.9283 bbs (login guest, password guest)
E-mail robot info@lightside.com
E-mail human: lightside@lightside.com
World Wide Web: http://www.lightside.com/
Prices subject to change

## BBS Spotlight

By John Wolcott

### Engaging The Empire

**YES, THERE IS STILL GREAT VALUE** among subscription BBSes.

Having been on the modem scene for over two years, The Empire BBS in Upland (near Pomona) presents features you'd expect to find on high-end systems, but for a very reasonable subscription fee; at least the fifteen hundred registered users think so.

The system currently offers ten incoming phone lines for normal use and supports baud rates up to 14,400. An IBM/PC-compatible 486DX2-66 computer runs the BBS with Galacticomm's MajorBBS v6.25 software, presenting an impressive interface. Both ANSI and RIP graphics are supported. If you run or are considering running RIP graphics, you'll need to download the RIP graphics package and/or the icon set for this particular BBS.

System Operator Ken Podejko, alias The Emperor, is a longtime BBSer. He started the BBS as a hobby; having met his wife and cosysop Tina Marie, alias Tigana, at a BBS user group meeting. "I just didn't see BBS needs being met in this geographical area," says Podejko. "I started the BBS to fill a social void and it has really grown. We are also proud to be a member of Los Angeles Multiline BBS Sysop Society (L.A.M.B.S.S.), gaining the support and advisement of other system operators to promote premium system operation."

Features offered include the Chat Lounge, Electronic Mail, Games, a Library of Files, Match Maker, and anonymous personal ads. These provide the experienced user with the system necessities in a way that is accessible to novice users unfamiliar with cryptic-looking commands. Help for any of these menu options is available from anywhere within the system by typing "/help." The Emperor has even created custom help files for special commands to easily familiarize you with BBS functions.

One of the features of the BBS Podejko promotes is total anonymity through the use of aliases; allowing unbridled exchange among users. The Chat Lounge will allow you to converse with other system users who are currently connected. There are three levels of chat interaction on the BBS: Adult, Teen, and General categories. Clever action commands are also available that will display messages to other users by typing one or two words. A complete list of actions may be summoned by typing "/a list." You'll want to have your screen capture turned on and print this list of commands for later reference. You can even play poker against other users while in chat. Type "poker on" from within the Chat Lounge to engage in head-to-head poker play.

Electronic Mail is not currently networked with other systems; however, this feature will allow you to communicate with other system users if you can't seem to catch them in chat.

There are many online games, including Fazuul, Hangman, and Quest for Magic. The newest and most alluring game is Trade Wars 2002 Interactive. Play this exciting online game against other connected users in real time. Here's your chance to defend the space lanes against ruthless space pirates, or become a pirate yourself. This is a terrific break from download and email chores.

The library of files is somewhat limited, with just over nine hundred programs available for download. However, the system operators are anxious to ensure that you can find what you need. If you don't see an application listed in the library that you'd really like to have, ask for it. If they don't have it in an archive, they'll get it and make it available. Files are available for several computer platforms including IBM/PC compatible, Mac, Amiga, and even Atari. All popular download protocols are supported including ZMODEM. All files in the library have been virus-scanned for your protection.

Match Making is a popular feature on this BBS. You may submit information about yourself and then browse through listed attributes of others. The system operators boast of having joined many users through this "electronic mate search" function. Anonymous personal ads take this a step further; presenting an opportunity to seek for particular interests from other users.

This socially active board goes beyond the modem with regular "user group meets" at Lamppost Pizza on Foothill Boulevard in Upland. This presents an opportunity to actually see some of the other users. Other popular social aspects featured are incentives for free subscription time. If you can manage to win the weekly trivia contest or the "Who Am I" user game, or even post the highest number of uploads, you'll be rewarded with extra board usage.

The Empire offers unlimited system access for the minimal fee of $7.50 per month. This is an excellent subscription BBS value. The Empire can be reached by calling (909)946-1448 with the standard protocols of 8-N-1. Give them a call for a great social experience. ■

*Copyright © 1995 by John Wolcott. All rights reserved.*

# 3 YEARS ON-SITE SERVICE FREE

# Grand Opening In Riverside

Celebrating Our 7th Year in Business!

Intel Inside

## MARS 486DX2/DX4 VL-bus Systems

**FCC CLASS B CERTIFIED**

- Intel 486DX2/66 or 486DX4/100MHZ CPU
- 4MB (72-pin) system RAM, max 128MB
- 256KB write-back cache RAM, max 512KB
- P24T upgradeable; full green function motherboard
- 420MB IDE mode-3 hard drive; 1.44MB floppy drive
- 32-bit VESA local bus IDE mode-3 hard/floppy drive controller
- 2 hi-speed serial, 1 ECP/EPP parallel, floppy controller
- 32-bit VESA local bus video card w/ accelerator & 1MB DRAM
- 14" Shamrock SVGA monitor (1024x768, .28dp, N/I)
- 101-key enhanced keyboard
- Mid-tower or desktop case, 230W UL power supply
- Sony 5SE double-speed internal CD-ROM drive
- MS-DOS 6.2X with disks & concise guide

**486DX2/66 VL-bus $1299**

**486DX4/100 VL-bus $1399**

## MARS Pentium 90/100 MHz PCI Systems

**FCC CLASS B CERTIFIED**

- Intel Pentium 90/100MHz CPU & Intel Neptune chip set
- 8MB (72-pin) system RAM, max 512MB
- 256KB write-back cache RAM, max 512KB
- P54CT upgradeable; true 3.3v operation
- 540MB IDE mode-3 hard drive; 1.44MB floppy drive
- 32-bit PCI IDE mode-3 hard drive controller
- 2 hi-speed serial, 1 ECP/EPP parallel, floppy controller
- 32-bit PCI video card w/ 64-bit accelerator & 1MB DRAM (Diamond)
- 15" Shamrock SVGA N/I monitor (1280x1024, .28dp)
- 101-key enhanced keyboard
- Mid-tower case, 200W UL power supply (case not shown)
- Sony 5SE double-speed internal CD-ROM drive
- MS-DOS 6.2X with disks & concise guide

**Pentium 90MHz/PCI $2299**

**Pentium 100MHz/PCI $2439**

*The Intel Inside logo is a registerted trademark of Intel Corporation

## MARS • N • O • T • E •

NOTE ƎTOИ NOTE ƎTOИ

We custom configure systems to meet your needs. If you don't see it, please call for a quote.

We provide expert local area network (LAN) installation and service (Novell and LANtastic).

If you would rather fight than switch, we are available to do upgrades-- motherboard, CPU, RAM, hard drive, CD-ROM, tape drive, etc. Please call for a quote.

COMPONENTS:
We also have excellent prices on a full range of PC-compatible components. Please call for a quote.

SOFTWARE:
Sorry, we only carry operating systems and GUI's.

WARRANTY (ON COMPLETE SYSTEMS):
Parts one year; lifetime labor (for repair or replacement of defective hardware/software); and three (3) years of on site service within most of LA and Orange counties and the Riverside/ San Bernardino area (outlying areas may be covered with a surcharge). Please ask your sales person for details and specific service area coverage.

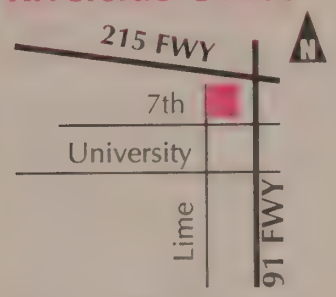
NO SURCHARGE FOR CREDIT CARDS:
We Accept

VISA DISCOVER

DISCLAIMER
Prices,configurations,availability, and terms and conditions are subject to change without notice.

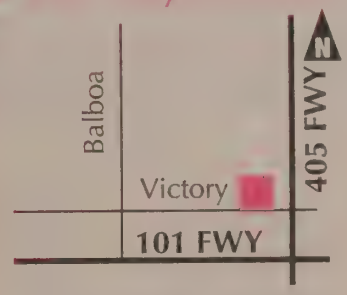
# MARS COMPUTERS

## Riverside Office



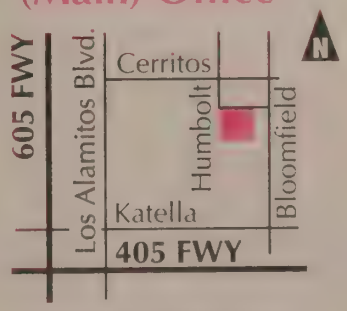

3600 Lime St, Suite 315
Riverside, CA 92501
Phone: (909) 274-9698
Fax: (909) 274-9725
Days/hours of operation:
M-F, 9:00-5:30

## Van Nuys Office




16209 Victory Boulvard,
Van Nuys, CA 91406
Phone: (818) 785-7608
Fax: (818) 785-7634
Days/hours of operation:
M-F, 9:00-5:30

## Los Alamitos (Main) Office




10655 Humbolt Street,
Los Alamitos, CA 90720
Phone: (310) 493-0719
Fax: (310) 493-0787
Days/hours of operation:
M-F, 7:30-6:30

BETTER BUSINESS BUREAU

Ad Code MT030695

# BULLETIN BOARDS cont.

MatchMaker (17K+ users). Sysop: Joseph Gomez. [Exp. #134.]

**US Pompeii.** (213)878-2801; local numbers for 310, 805, and 818. 8-N-1, 24 hrs., 14,400. Local/international email, Internet, forums, chatlinks. MatchMaker, files, 21+. One month free. [Exp. #134.]

### 213

**BBS Central.** (213)464-0200. 24 hrs., 28,800. Multiline, multi-interest, Windows, free Excalibur users terminal. Free 15 min./day. [Exp. #134.]

**Biker Network.** (213)644-0391. 8-N-1, up to 14,400. Biker GIFs, messages, for sale, lost/found, Mac shareware, CD-ROM research. Sysop: Al Walker. [Exp. #134.]

**The Career Network BBS.** (213)629-1472, 933-4999. 8-N-1, 5:30 pm–1:30 am, 2400/9600/14,400. Hundreds of JOBS! throughout the US; your resume can reach 200+ employers monthly. Sysop: Steven McCormick. [Exp. #136.]

**CD-ROM BBS.** (213)644-0391. 8-N-1, up to 14,400. Market research, CD news. Who? What? Where? Fee. [Exp. #135.]

**Janin BBS.** (213)564-0995. 8-N-1, 24 hrs., 1200– 14,400. Amateur radio discussion and Internet email. Fee: details online. [Exp. #134.]

**Leonardo Internet.** (213)876-5285. Full PPP access to absolutely every Internet service available. $17.50/mo. Contact Dr. Robert Amodeo, *robert@leonardo.net*, (310)395-5500. [Exp. #136.]

**Mark'System BBS.** (213)758-0684. 8-N-1, 24 hrs., up to 14,400. Music, musicians, Mopars, technology, and controversial topics! Free limited access. Sysop: Mark S. Lewis. [Exp. #134.]

**OPAMP Online.** (213)957-6915. 24 hrs., Technical book catalog, ChapterSearch, computer and other technical disciplines. Free. [Exp. #134.]

**Pacific Online.** (213)344-4444 @ 2400, 344-4445 @ 14,400. 8-N-1, 24 hrs. 10 lines. Internet email, files, 5GB system, multiplayer games, more. Free/fee. Sysop: Steve Jackson. [Exp. #136.]

**SoulPartners' Computer Online Date.** (213)223-3440. 8-N-1, 24 hrs., up to 14,400. Find a soulmate! Get free recommendations and free online dates! Free/fee. Sysop: Maggie Lok. [Exp. #136.]

**The Venture Capital Exchange BBS.** (213)623-0887. 8-N-1, 28,800. Home of Evans 1000 Venture Capital Directory, investment proposals, barter deals, more. No fee. Sysop: Mervin Evans. [Exp. #134.]

### 310

**Adult Access BBS.** (310)657-5775. 24 hrs., 28,800. Multiline, multi-interest, adult XXX GIFs, free Excalibur users terminal (Windows). Free 15 min./day. [Exp. #134.]

**The Bizopps Connection.** (310)677-7034. 8-N-1, 24 hrs., up to 14,400. Provides listings of business and franchise opportunities; online database; and more. Sysop: Lawrence C. Toliver. [Exp. #135.]

**California On-line by EIN.** (310)817-4346. 14,400/28,800. Multimedia Windows environment; music, travel, news, fashion, entertainment, Hollywood, Internet access. Sysop: Don Goering. [Exp. #136.]

**Chaos Online.** (310)318-5089, 318-2289. Up to 14,400. Windows shareware, adult GIFs, games, chat, messages, free downloads. [Exp. #134.]

**The Dark Crystal BBS.** (310)522-9633. 8-N-1, 24 hrs., Message area, shareware, CD-ROMs, Sci-Fi news, Amiga news, adult area. Free. Sysop: Jesus Muniga. [Exp. #134.]

**Fantasia BBS.** (310)986-9705. 8-N-1, 24 hrs., 2400–28,800. The Carpool lane on the Information Superhighway, Internet, chat, games. Free/fee. Sysop: Brian Andrus. [Exp. #134.]

**Gato's Lair BBS.** (310)392-3114. 24 hrs., 8-N-1, 2400–28,800. Net echos, online games, email, adult section, 10:1 ratio. Free. [Exp. #136.]

**Health Online.** (310)831-6775. 8-N-1, 24 hrs., 1200–28,800. For healthcare professionals, caregivers, patients, people interested in their own health; files. Free. Sysops: Tom and Susan Dorsey. [Exp. #135.]

**Independent Filmmakers Forum.** (310)425-0012. 8-N-1, 24 hrs., 2400/9600/ 14,400. Online networking for independents, forums, chat, job listings, free screening passes, and more. Free trial. Sysop: Philip Matuzic. [Exp. #134.]

**InterMind Teen BBS.** (310)542-8502. 8-N-1, 24 hrs., 1200–28,800. Free local BBS for South Bay teens. Sysop: Nels Pearson. [Exp. #136.]

**Leonardo Internet.** (310)395-0736. Full PPP access to absolutely every Internet service available. $17.50/mo. Contact Dr. Robert Amodeo, *robert@leonardo.net*, (310)395-5500. [Exp. #136.]

**Mac-Hac'ers BBS.** (310)549-9640 with rollover. 8-N-1, 24 hrs., 1200–28,800. 11 CD-ROMs, OneNet and Internet with satellite feed for immediate updates. Sysop: Bud Grove. [Exp. #136.]

**The Möbius Strip.** (310)599-7225. 24 hrs., 300–14,400. Registered WWIV board, strong message base, onliners, RPG, instant access. Free. [Exp. #134.]

**One World.** (310)372-0987. Ecology, gardening, health, alternative news, international network. Free. [Exp. #136.]

**Original Apple Corps BBS.** (310)454-4660. Apple II support. Sysop: Ed Molina. [Exp. #136.]

**Servant Christian BBS.** (310)371-2770, 371-3130, 371-0251. 14,400. Three lines. A modem ministry for both Macintosh and Windows users. Administrator: Doug Wade. [Exp. #134.]

**South Bay Apple Computer Club BBS.** (310)538-1913. 8-N-1, 24 hrs., 1200–14,400. Apple II support and free Internet email access. No fee. [Exp. #134.]

**South Bay Apple Mac User Group BBS.** (310)792-8083, 792-0264. 24 hrs., Multiline, FirstClass. Administrator: Dr. Dave. [Exp. #134.]

**Triana's Treehouse.** (310)517-0488. 24 hrs., 300–2400. 17+, chat, files, growing fast. [Exp. #136.]

**Upper Transylvania BBS.** (310)515-6843, 515-6953. 24 hrs., 1200–28,800. 12 family-oriented CDs online, AGAPE Christian Network hub. Free. Sysop: Ron Hoffman. [Exp. #134.]

**VidKid BBS.** (310)338-6095. 8-N-1, 24 hrs., 14,400. Formerly Chastity Realm. Free family fun, lots of files and subs. [Exp. #136.]

**WBE-Net™.** (310)828-0182. 8-N-1, 1200–14,400 or better. Password: FM. A global market information system, promoting international trade. [Exp. #136.]

**WorldWorks Symposium BBS.** (310)312-3370 or telnet *worldworks.com* 28,800. Myth-busting information, conspiracy theories, how the world works. No fees. [Exp. #135.]

### 408

**Garlique Graphics Image Center.** (408)847-0665, 847-5076. Adult GIFs, Internet newsgroups, shareware, adult CD, instant access. Excellence online. [Exp. #134.]

### 714

**1% Homeseller BBS.** (714)990-4802. 8-N-1, 24 hrs., 2400/14,400. Homes for sale in Southern California. Free. [Exp. #136.]

**3 Systems In One.** (714)969-


Come Play with us... FREE Games!

**Link BBS** has been linking people since 1983!

INTERNET & MORE!

Call via Modem (310) 459-1264
Local to 213, 310, 818!!

*As seen in NETGAMES, We have all the BEST Games! 24 Hrs! Chat Live with Thousands of People and Shop Online too! Over 40 Gigabytes Online... & Checkout our NEWSWIRE. For more Information*

**Call us @ (800) 459-3340 or (310) 459-5051.**
**Internet E-mail: sysop@linkbbs.com**

Amateur Action "Live"

ONE•ON•ONE
24 hrs./day

KINKY FOREIGN PHONE SEX
18 yrs & older

10718-1604-821-7911
No long distance charges!
Just $3.99/minute.
No CC Needed

Amateur Action BBS

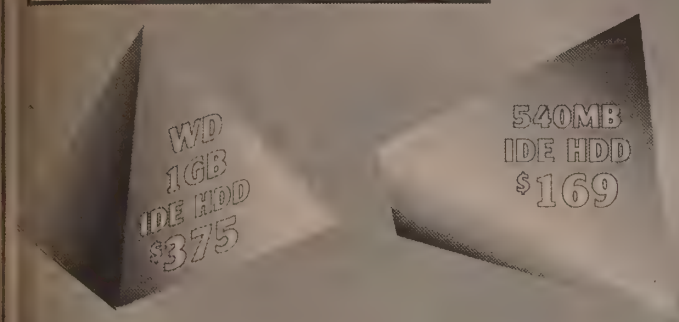
World's Largest Collection of Amateur Adult GIF Files.
Over 24,000 GIFs on line.
"The Information Super Highway"
"The Nastiest Place On Earth"

(408) 263-3393 28,800 V.FC

40 High Speed Lines
US Robotics 28,800 baud
Modems on all lines
Easy Connection! No Waiting!

VISA DISCOVER MasterCard

# MD MICRO DATANET




## NOTEBOOK SPECIAL!

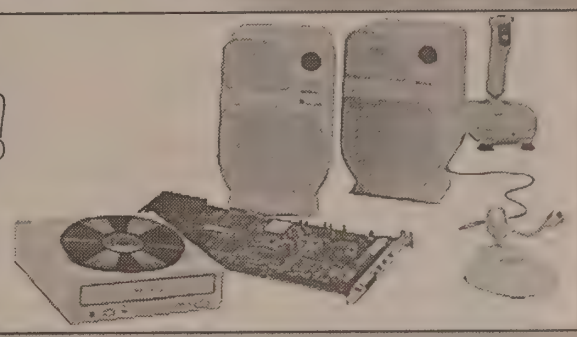
PACKARD BELL
STATEMAN PLUS 200C
486SLC/250MHz • Color
**ONLY $1199**

## COMPLETE SYSTEM

IBM 486SLC2/66MHz
**ONLY $829**

## SPECIAL MEMORY UPGRADE!

| | | | |
|---|---|---|---|
| 1MB | SIMMS | 30 PIN | '35.90 |
| 4MB | SIMMS | 30 PIN | '119 |
| 4MB | SIMMS | 72 PIN | '141 |
| 8MB | SIMMS | 72 PIN | '275 |
| 16MB | SIMMS | 72 PIN | '425 |



**CUSTOM CONFIGURED SYSTEMS • NOBODY BEATS MICRO DATANET's SYSTEM PRICES & QUALITY**

## SPECIAL SMART SYSTEM
### 486DX2/66MHZ VLB SYSTEM

- 4MB RAM BRAND NAME
- 420MB IDE Hard Drive
- 1MB VESA Local Bus
- LV Bus 32bit Controller
- TEAC 1.44 Floppy Drive
- Soft Touch 101 Keyboard
- Deluxe Mini Tower Case w/LED-300W
- Microsoft Compatible Mouse
- Monitor not included

ONLY $750

SYSTEM: SAME AS ABOVE
486DX2/80MHz AMD $849
486DX4/100MHz INTEL $899

## MD SYSTEM SPECIAL!
### PENTIUM

- 3 PCI Slots, 256K Upgrade to 512K
- 15" Flat Screen, N/I, .28dpi
- 8MB RAM BRAND NAME
- 540MB IDE hard drive
- S3 VISION 864 PCI Upgrade to 2MB
- PCI IDE I/O Controller
- TEAC 1.44 Floppy Drive
- Deluxe Mid Tower Case w/LED-230W
- Focus 2001 Keyboard
- Microsoft Compatible Mouse

**ONLY:** P5/90MHz .....$1949
P5/60MHz .....$1650

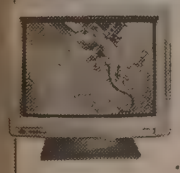
## MULTIMEDIA UPGRADE KIT

*SONY CDU-55E IDE 2X
CD ROM Drive w/Acer 30 Creative Chipset
16 Bit Sound Card $179

*MITSUMI 4X IDE CD ROM DRIVE
w/Acer 30 Creative & CD title Deluxe 4
(US/World Atlas, Chessmaster,
Tech Typing) $279

*120 Watts Speaker SPECIAL!
ONLY $65/pair

## MONITORS



14" N/I, L/R,
.28DPI Shamrock.....$210
15" Flat Screen, N/I,
L/R Digital .28DPI, Shamrock .....293
17" Flat Screen, N/I, L/R
.26DPI Edison.....525

MAG
DX-15F 15" .28DPI N/I, 1280x1024 MPR-II GREEN ....335
DX-17F 17" .26DPI N/I, 1280x1024 MPR-II GREEN ....635
MX-21F 21" .28DPI N/I, 1600x1280 MPR-II GREEN ..1615
VIEWSONIC
V15EX 15" .28DPI N/I, 1024x768 DIGITAL MPR-II GREEN....365
V17E 17" .28DPI N/I, 1280x1024 MAC MPR-II GREEN....699
NEC, SONY .....PLEASE CALL

## HARD DRIVES & TAPE DRIVES

250MB IDE .....$139
420MB IDE .....165
540MB IDE.....205
730MB IDE .....299
1.0GB IDE, Western Digital .....375
1.2 GB SCSI 2112S Micropolis.....489
1GB Micropolis 2210AV IDE (5YR. WARRANTY) .....435

## CPU

Pentium P5/90MHz.....$595
Pentium P5/60MHz .....389
DX2-66MHz Intel .....165
DX2-80MHz AMD .....149
DX4-100MHz AMD .....289
DX4-100MHz INTEL.....319
AMD Please CALL for Best Price

## VIDEO/CONTROLLER CARDS

S3 Vision 864 - PCI SVGA 1MB Upgrade to 2MB.....$109
Diamond Speedstar Pro PCI 1MB.....149
Diamond Stealth 64bit PCI w/2MB VRAM.....289
SVGA Vesa S3-805 w/1MB, Upgrade to 2MB.....76
Trident 9400 32bit, 1MB, Upgrade to 2MB.....69
Trident 9440 32bit, 1MB, Upgrade to 2MB.....82
SVGA Oak 087 1MB w/Window Accelerator.....56
Trident 8900D 1MB Card ISA.....55
Super I/O IDE (2S,1P,1G) Goldstar.....14
32bit Prime2 Bus I/O.....19
Adaptec 1542CF SCSI II.....189

## CASES w/DIGITAL DISPLAY

DELUXE MINI TOWER w/230W P.S. .....$38
DELUXE MID TOWER w/230W P.S. .....59
DELUXE FULL TOWER w/250W P.S.....69

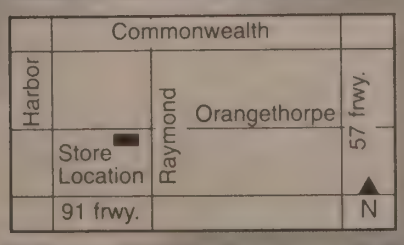
## MOTHERBOARDS

PCI - MB Intel P5/90MHz, 3 PCI, 256K, Zif .....$289
PCI - MB Intel 60/66MHz, 3 PCI, 256K, Zif .....279
486DX-33/50/66/4-100MHz, VLB, 256K, Zif.....92
486DLC-40MHz w/Math Co., 128K, CPU .....110
IBM 486SLC2/66MHz VLB w/MATH CO.....135
PCI - MB P5-60/66MHz M/B (opti chipset)
PCI/VLB/ISA Slots .....189
PCI - MB 90MHz m/b (sis chipset) PCI/VLB/ISA slots .....219

## FOR BEST BUY:

JUST CALL OUR SALES DEPARTMENT!

DISCOVER VISA MasterCard AMERICAN EXPRESS




Prices subject to change w/out notice. Not responsible for typographical errors. All prices reflect 3% cash discount. All systems come w/a one year parts and labor warranty. All product names are trademarks of their respective owners and companies.

**TEL: 714/447-8710**
**FAX: 714/447-8711**

Hours: Mon. to Fri. 9am-6pm Sat. 10am-3pm
90 Days Same As Cash!

**920 E. Orangethorpe Ave., Suite F, Anaheim, CA 92801**

# BULLETIN BOARDS cont.

9624. 8-N-1, 24 hrs., 300–28,800. 14 lines. ANSI and RIP, real estate info, MajorNet forums, email, chat, games. Sysop: Doug Campbell. [Exp. #134.]

**Brian's World BBS.** (714)530-3123. 24 hrs., 2400–14,400. Internet/Usenet, chat, adult, Apogee, thousands of files, games. Some fees. Sysop: Brian Anderson (aka The Big Cheese). [Exp. #136.]

**Budapest BBS.** (714)895-4885. 8-N-1, 24 hrs., 1200–14,400. Bilingual, writers, news, politics, history, anthropology, legends, myths, books, messages. [Exp. #134.]

**Check Six BBS.** (714)362-8299. 8-N-1, 1200–28,800. Five lines. Flight simulation msgs. and files, Internet, Usenet, SimNet. Limited free access. Sysop: Patrick Gost. [Exp. #134.]

**Crossroads.** (714)724-1041. Up to 28,800. 1.2GB online, CD-ROM, adult files. Full access for free. [Exp. #134.]

**Cyber Arena.** (714)577-9568. 8-N-1, 24 hrs., 2400–14,400. General file areas available to everyone, with fees for technical support areas. Free/$15 per mo. Sysop: Dan Tanner. [Exp. #136.]

**Frolic Room.** (714)839-2174. FidoNet, files, online gem CD-ROM. $15 every three months. Sysop: Fred Piersee. [Exp. #136.]

**GaDgEtS, gizMoS aNd OtHeR cOoL ThinGs To BuY.** (714)992-1732. 24 hrs. Offers a wide range of truly unique products to purchase online; GUI. Free. [Exp. #136.]

**Global BBS.** (714)373-1544. 24 hrs., 2400–14,400. For political junkies! Internet, FidoNet, VirtualNet. Politicians and organizations online! [Exp. #134.]

**Graphics Development Association.** (714)651-1812. 8-N-1, 24 hrs., 28,800. Adult GIF, RIP, Windows, Amiga, Ray-Tracing, BMP, CAD. $15/yr., parts free. [Exp. #134.]

**Happy Trails BBS.** (714)547-0719. 24 hrs., 28,800. Seven lines. FidoNet, Internet, UChat, QSO, 2GB downloads. Free trial. Sysop: Don Inglehart. [Exp. #136.]

**Hell's Door BBS.** (714)891-6083. 8-N-1, 24 hrs., up to 28,800. Features to place this BBS above the rest. Free. Sysop: TNT. [Exp. #134.]

**Hillside BBS.** (714)362-9675. 8-N-1, 24 hrs., 1200–14,400. Free access Christian BBS. Files, door games, and more. Sysop: Robert Savage. [Exp. #134.]

**Infinity BBS.** (714)898-3236. 8-N-1, 24 hrs., 300–14,400. Internet, Usenet, satellite fed shareware, games, teleconference, call today! Sysop: Dan Minear (suitcase). [Exp. #134.]

**The Irvine "X"Change BBS.** (714)552-0589. 8-N-1, 24 hrs., 2400–28,800. Online games, s/w files, messages, bulletins. Free access w/adult fee. Sysop: Richard Neilssien. [Exp. #134.]

**Midnight Jungle BBS.** (714)280-1503. 8-N-1, 24 hrs., 14,400. Multinode. Chat, six CD-ROMs, adult areas, Internet access, games. Basic access free. Sysop: Chieftain. [Exp. #134.]

**The Midnight Mission BBS.** (714)848-6808. 8-N-1, 24 hrs., 1200–14,400. Four lines. Large game and XX-GIF file areas. Full access with call back. Sysop: Marty Strech. [Exp. #134.]

**Mission Online.** (714)258-0707. 24 hrs., 28,800. Multiline. RIP, CD library, forum for programmers and data processing professionals. Free. Sysop: Kurt Steffien. [Exp. #134.]

**The Modem Express.** (714)994-9502. 14,400. Files, games, doors, chat, multiuser interest. [Exp. #135.]

**Pathway BBS.** (714)236-4247. 8-N-1, 24 hrs., 1200–14,400. Get into the swing of things. Adults only. Sizzling chat. [Exp. #134.]

**Prime Cut Magazine BBS.** (714)542-4566. Windows BBS, all adult. You won't believe your eyes! Free look see. [Exp. #135.]

**Publishers Online.** (714)548-2110. 24 hrs., 300–28,800. You are the sysop! Magazines, newsletters. One key logon. $1/month. Sysop: Jerry Macoy. [Exp. #136.]

**VisuaLink Systems BBS.** (714)978-0194. 8-N-1, 24 hrs., 14,400. Prechecked, clean used vehicles. Expertise, digital photographs, condition reports, more. Free. [Exp. #135.]

### 805

**The New Dork Sublime BBS.** (805)823-1346. 300–14,400. NIRVANAnet SoCal hub. We're underground like a wild potato. Don't die wondering... Sysop: Biffnix. [Exp. #136.]

**SCV PC Users Group BBS.** (805)297-7993, 297-7994. 24 hrs., 2400–14,400. Files, Interlec email, Wildcat BBS. $35/yr. [Exp. #134.]

**Twilight Zone BBS.** (805)258-0413 (16,800), 258-4956 (14,400). 24 hrs., up to 16,800. Games, CD-ROMs, Internet email, FidoNet, MuFon Net, Xtasy Net, adult areas. Sysop: Rob and Liz Ayers. [Exp. #134.]

### 818

**Ace Station BBS.** (818)891-0397. 24 hrs., 28,800. Chat, Internet, games, files, 500 CD-ROMs, 15GB H/D—350GB total. [Exp. #136.]

**Adult Access BBS.** (818)784-5775. 24 hrs., 28,800. Multiline. Full GUI user interface for real Windows point and click. Free 15 min./day. [Exp. #134.]

**Avatar Online Systems.** (818)969-8227. 24 hrs., 2400–14,400. 32 lines. Family BBS, MajorMudd, TelArena, other games, chats, tutors, forums. Sysop: Nancy Teppler. [Exp. #134.]

**Blazin' Bytes BBS.** (818)776-2777. 16 lines of fun. Games, pubs/SIGs, chat, warm family-style adult board, women welcome. Sysop: Barbara Mallut. [Exp. #136.]

**Computer One.** (818)763-0678. 24 hrs., 14,400. Internet, FidoNet, 20,000+ files, 25 online games, family oriented. Free trial. Sysop: Ed Baker. [Exp. #134.]

**The Continuum BBS.** (818)441-3867. Files, doors, chat, Internet email. Sysop: Jon Carmichael. [Exp. #136.]

**David's Amazing BBS & Internet Services.** (818)997-7500. 24 hrs., up to 14,400. Showing off the Net with a smile, not a scowl. Free for now. Sysop: David Dennis. [Exp. #135.]

**Dr. Tracy Cabot's LoveLine.** (818)901-6117. Noon–9 am, 2400–14,400. Private, professional counseling; personalized compatible evaluations; real people, ID-verified! Free browsing. [Exp. #134.]

**Earthquake City BBS.** (818)368-3337. 8-N-1, 24 hrs., 14,400. Files, messages, games, 1GB online. Free. Sysop: Steven Libis. [Exp. #135.]

**Eclair Online.** (818)288-0573. 24 hrs., 2400–28,800. Free Internet email; sports, USA Today, CD-ROM, files, weather, more. Free. Sysop: Henry Ho. [Exp. #135.]

**Follow Your Heart—Heart Disease Support BBS.** (818)776-2778. 24 hrs. For heart disease patients, family, friends, caregivers, plus medical community; caring. Free. [Exp. #136.]

**The Galaxy-II BBS.** (818)706-0130. Up to 28,800. Three lines. Supports Galaxy-II game. All gamers welcome, LORD, Assassin, more. Free and fee. Sysop: Brett Tondreau. [Exp. #134.]

**Ghost Town BBS.** (818)996-9913. 24 hrs., 14,400. 16 lines. All ages welcome, interactive online games, files, much more. [Exp. #136.]

**InvestorLink.** (818)331-4611. Interested in stocks? Real estate? Commodities? Opportunity? We are the investor's BBS. Sysop: Steve Painter. [Exp. #136.]

**LA Free-Net.** (818)776-5000. 8-N-1, 24 hrs., up to 14,400. 16 lines. Nonprofit community network with extensive Internet connections: newsgroups, gopher, email; and more. $10/year. Sysop: Alex Jalinous. [Exp. #135.]

**Leonardo Internet.** (818)345-9208. Full PPP access to absolutely every Internet service available. $17.50/mo. Contact Dr. Robert Amodeo. *robert@leonardo.net*. (310)395-5500. [Exp. #136.]

**Movers & Shakers—Parkinson's Center BBS.** (818)776-2784. 24 hrs. For Parkinson's Disease patients, caregivers, families, friends, and medical community. Warm and personal. Free. [Exp. #136.]

**On The Bright Side—Agoraphobia Support Board.** (818)776-2781. 24 hrs., For those with agoraphobia/ panic disorders, family, friends, caregivers, medical community; caring. [Exp. #136.]

**The Open Mind Discussion Club BBS.** (818)758-9348. 24 hrs., 300–14,400. Current and topical event discussions, all computers welcome. No fees. Sysop: Bill Greenland. [Exp. #134.]

**Panasia BBS.** (818)569-3740. 24 hrs., 2400–28,800. Worldwide echomail and Internet email, high-quality file area. Free access. [Exp. #135.]

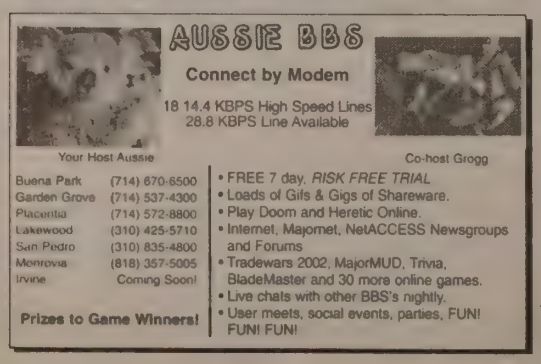
**The SLATE BBS.** (818)763-9172. 8-N-1, 24 hrs., 300–14,400. Sports, law, tons of everything, files, original games, and more. Free. Sysop: Robbie Reed. [Exp. #134.]

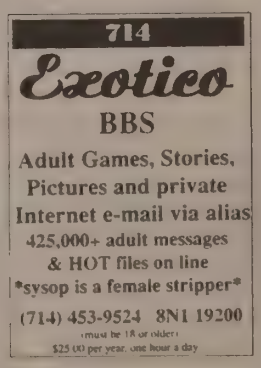
**SONiC Dreams BBS.** (818)831-6052. 24 hrs., 1200–28,800. Online games, files, echoes. No fee. [Exp. #134.]

**Sugar Free BBS! Diabetes Support Board.** (818)776-2779. 24 hrs., For those with diabetes, family, friends, caregivers, medical community; caring. Free. [Exp. #136.]

*Continued*

Spectrum On Line
SAVE MONEY, CHECK US OUT!!
•Chat •E-Mail •Forums •Matchmaker
•Interactive On-Line Games
Featuring Doom and The Casino
•Shareware Files •8 High Speed Lines
Visa & Mastercard Accepted
Voice (909) 396-7575
Modem (909) 396-9117


AUSSIE BBS
Connect by Modem
18 14.4 KBPS High Speed Lines
28.8 KBPS Line Available
Your Host Aussie
Co-host Grogg
Buena Park (714) 670-6500
Garden Grove (714) 537-4300
Placentia (714) 572-8800
Lakewood (310) 425-5710
San Pedro (310) 835-4800
Monrovia (818) 357-5005
Irvine Coming Soon!
Prizes to Game Winners!
• FREE 7 day, RISK FREE TRIAL
• Loads of Gifs & Gigs of Shareware.
• Play Doom and Heretic Online.
• Internet, Majornet, NetACCESS Newsgroups and Forums
• Tradewars 2002, MajorMUD, Trivia, BladeMaster and 30 more online games.
• Live chats with other BBS's nightly.
• User meets, social events, parties, FUN! FUN! FUN!


714
Exotico
BBS
Adult Games, Stories, Pictures and private Internet e-mail via alias
425,000+ adult messages & HOT files on line
*sysop is a female stripper*
(714) 453-9524 8N1 19200
(must be 18 or older)
$25.00 per year, one hour a day

# ASSOCIATIONS

**International Interactive Communication Society.** Meetings: 2nd Mon. Virtual reality, multimedia, info highway issues, and more. Call: (310)313-5664. [Exp. #139.]

**Planet Data Service Company's Desktop Publisher's Association.** Meetings: 1st Mon., 7:00 pm, Covina. Support group and networking for those in DTP fields. Newsletter, referrals, and more. $50/yr. Call: (818)332-0329. [Exp. #137.]

**Software Council Of Southern California.** Meetings: usually 4th Wed., 6:00 pm, Long Beach Marriot, Main Ballroom, 4700 Airport Plaza Dr.; also breakfasts and luncheons around SoCal. A nonprofit trade association of software development organizations and companies providing support and services to the local software industry. Call: Bill Manassero, (310)328-0043. [Exp. #138.]

# Resources

## BULLETIN BOARDS cont.

**The Big "C" BBS—Cancer Support BBS.** (818)776-2780. 24 hrs., For cancer patients, family, friends, caregivers, medical community; warm and caring. Free. [Exp. #136.]

**Tin Shack BBS.** (818)992-3321. 300–14,400. All the latest files you'd ever need at high speed! Free. Sysop: Guy Nohrenberg. [Exp. #136.]

**Valley West Online BBS.** (818)888-8419. 8-N-1, 24 hrs., 14,400. Multiline. 70+ games, 2GB, Fun! Donations based. [Exp. #136.]

**Wizardry BBS.** (818)222-4444. 2400–14,400. Online games, downloads, uploads, adult GIF and text files. Free. [Exp. #136.]

**Wyrm BBS.** (818)793-2426. 8-N-1, 24 hrs., 28,800. PC files user-evaluated. Uploaders paid. Online games. [Exp. #136.]

### 909

**CafeXpresso: An Electronic BBS Coffeehouse.** (909)944-3336. 8-N-1, 24 hrs., 14,400. Writers, readers, artists, the coffeehouse culture. Sysop: Joseph Valentinetti. [Exp. #136.]

**CompuShopping Net.** (909)464-2750. 24 hrs., 2400–14,400. Lowest price CD-ROM titles sale, free download CD catalog with PCX picture. [Exp. #134.]

**The Dark Tower.** (909)598-0036. 8-N-1, 24 hrs., 1200–28,800. Nine CD-ROM drives, huge adult section, Usenets, free Internet email. [Exp. #134.]

**Data Connection.** (909)698-7257. 8-N-1, 24 hrs., 28,800. Multiline. 50,000 files, Global Link, Internet newsgroups, HotNet, satellite feed. Sysop: Dennis J. Clark. [Exp. #136.]

**Dragon's Lair BBS.** (909)794-4340. 8-N-1, 24 hrs., 1200–14,400. CD-ROM, large file base, FidoNet, WWIVnet, ICEnet, many echoes, msg. bases. Free access. Sysop: Hawkeye. [Exp. #134.]

**electronic Gourmet Guide (eGG).** (909)338-5422. 8-N-1, 24 hrs., up to 28,800. *The eGG* is an online food magazine and chef's resource center. Guests free. Sysop: T. Way and K. Heyhoe. [Exp. #134.]

**The Empire BBS: The Next Generation.** (909)946-1448. 8-N-1, 24 hrs., 300–14,400. Multiline chat, all welcome, matchmaker, flower shop, files. From $2.50/month. Sysop: Tigana and Emperor. [Exp. #135.]

**The French Connection BBS.** (909)428-7648. 24 hrs. Eight lines. California's largest adults-only BBS. View GIFs online in Windows. Sysop: Christopher A. Moss. [Exp. #136.]

**Inland Sports BBS.** (909)789-2978. 8-N-1, 24 hrs., 1200–28,800. Sports conferences, many echoes, CD-ROM, 10,000+ files. Free access. [Exp. #134.]

**Legend Graphics Online.** (909)689-9229. 24 hrs. 16 lines. Super VGA photo images, MoviePICs, huge adults-only file areas. [Exp. #134.]

**Pleasure Dome BBS.** (909)628-7154. 24 hrs., 2400–14,400. True Windows GUI, multitasking, #1 adult BBS, 8GB+. Sysop: Kristopher M. Morales. [Exp. #134.]

**Spectrum Online Services.** (909)396-9117. 24 hrs., 9600. Eight lines. Interactive online games featuring Doom, chat, CD-ROM library, email, forums. [Exp. #134.]


GARLIQUE GRAPHICS
WORLD FAMOUS GIF'S
ADULT CD'S
FREE CATALOGS
SUBSCRIBE ON-LINE
MasterCard VISA AMEX
408-847-0665

Nitelog 33 Nodes
56,000 Files
BBS
Fidonet / Internet Email
Usenet / Rime / ILink Email
DOS / WINDOWS / NT
OS2 / UNIX / MAC
& ADULT FILES
(408) 655-1096
28.8k Lines Available too!
DISCOVER Cards VISA

Entertainment & Consumers Network
Full Internet Access (Mail, Usenet Groups, IRC, MUDS)
National Chat Services
Live & Multi-player Games
Play Doom Online & Other Modem Games
Over The Game Connection
Adults Only After 9pm
Subscriptions start at $10 per month
Tournaments & Contests
Public & Private Chat Areas
Dating & Matchup Features
2500+ Pubs & Forums
Large File Library
All 14.4 Modems (300 to 14.4)
FREE TRIAL!
(310) 324-5570 Long Beach
(818) 888-3942 Simi-Westlake
(818) 760-3828 E. SFV
(310) 204-6006 (Voice)
(310) 204-6007 West LA/LA
(818) 784-3039 W. SFV
(818) 249-3989 La Crescenta
Full Internet Access Included

Terminal Fantasies
A WINDOWS BBS
True Windows GUI gives you full Multitasking! Simultaneously download, view GIF's, and chat with other users! You'll never go back to ANSI!
Now with INTERNET E-Mail and USENET
26 CD-ROM's Online
GIGS OF GIF's
Just Say No... To DOS and RIP!
Forbidden Subjects: Asian Ladies
VISA MasterCard Welcome
FREE 2-Week Trial Access
28,800 Baud: 310-915-6141 Local Access!
14,400 Baud: 310-915-6135 818-981-0910

You're Invited...
... To take a ride on L.A.'s Premier BBS!
KBBS means ENTERTAINMENT
Five User Meets Weekly
Over 30 Gigs of Shareware
Adult Graphics & Animations
World Link Chat all Day and Night
Thousands of Singles
Free Photo Scanning
Dozens of Games & MUDs
Play DOOM & Heretic Online
KBBS means THE INTERNET
Telnet, Usenet, Chat
Internet Relay Chat
File Transfer Protocol
World Wide Web
Gopher & Archie
MUDs & Finger
E-Mail & Usenet News
High Bandwidth T-1 Access
Membership rates from 50 cents a day.
Over 5 million calls logged
KBBS Online
Long Distance Service by MCI. X.25 Service by Pacific Bell.
MCI CONNECT
PACIFIC BELL
A Pacific Telesis Company
R.S.V.P For Free Trial
We have many local login numbers for area codes 213,310,714,805,818,909
Voice: (818) 886-9457
Telnet Address 204.90.25.7
Via Modem
Beverly Hills (310) 558-0145
Northridge
Los Angeles

You're traveling aimlessly down the Information Superhighway, lost in CyberSpace without a map. You're frustrated with the "meat-market" scene and bored with unfriendly BBS's.
There is a REST STOP up ahead...
the ANNEX!
INTERNET
Telnet: 204.74.67.1 PPS: .ANNEX
INTERNET: Including Telnet, FTP & MORE!
Events & Parties, Active Chat, Daily On-Line NEWS, GIGS of Shareware Files, On-Line DOOM & other Multi-Player Games, our convenient VOICE SUPPORT Line, the Friendliest Callers & MORE!
Your Rest-Stop on the Information Superhighway
(818)779-5600 via MODEM (8N1)
FREE TRIAL!
Call 1-800-GO-ANNEX
For A Local # Near You!

# Resources

# USER GROUPS

## ACCESS

**Access Developers Group.** Meetings: 3rd Tues., 6:15 pm, Microsoft Orange County Office, 3 Park Plaza, Ste. 1800, Irvine (Jamboree at Main, next to Hyatt Regency). Meetings include formal presentations, tips and tricks, and Q&A sessions. Call: Michie Kobayashi, (714)770-0400, ex. 2217. [Exp. #134.]

## AMIGA

**Amiga Users Group Of Long Beach.** Meetings: 1st Thurs., 7:00 pm, Fire Station Bldg., 5373 E. Second St., Belmont Shores. All persons with an interest in the Amiga computer welcome. Free. [Exp. #137.]

## APPLE

**Champions Of The Mac Proletariat (CHOMP).** Meetings: monthly, 7:00 pm, Cal Poly Pomona. Question and answer, raffle of useful software, opportunity to purchase disks. Call: Craig Richards, (909)985-7385 or Mitch Cohen, (909)598-5766. [Exp. #139.]

**Original Apple Corps.** Meetings: 2nd Sun., West LA area. Apple II and Mac users group. Support for beginners through experts. Call: Fred Duffy, (310)450-3336. [Exp. #139.]

## ATARI

**All Computer Association Of Orange County.** Meetings: 2nd Sun., 1:00 pm, Fullerton Savings, 12860 Euclid Ave., Garden Grove. Supporting Atari, Macintosh, PC, and other computer systems. Call: (714)265-9357. [Exp. #134.]

**ATESIG—Atari 8-Bit SIG.** Meetings: 145 Surf Pl., Seal Beach. Cooperative user group for model railroad applications. Call: (310)430-5433. [Exp. #139.]

**South Bay All Computer Enthusiasts.** Meetings: 2nd Tues., 7:30 pm, VFW Hall, 1865 Lomita Blvd., Lomita (1 block W of Western). All skill levels. Call: Danny or Mary, (310)834-0040. [Exp. #137.]

## COMMODORE

**San Fernando Valley Commodore 64/128 Users Group.** Meetings: 1st Tues., 7:00 pm, Balboa Park Recreation Center, Rm. 2, Balboa and Burbank blvds., Encino. Call: Paul Kroll, (818)892-3859. [Exp. #137.]

## DESKTOP PUBLISHING

**Desktop Publishing Support Group And Network Social.** Meetings: 1st Mon., 7:00 pm, Covina. Hosted by Planet Data Service Company. $1 w/RSVP, $2 at door. Call: Diane M. Silvers, (818)332-0329. [Exp. #137.]

## IBM & COMPATIBLES

**All Computer Association Of Orange County.** Meetings: 2nd Sun., 1:00 pm, Fullerton Savings, 12860 Euclid Ave., Garden Grove. Supporting Atari, Macintosh, PC, and other computer systems. Call: (714)265-9357. [Exp. #134.]

**Fresno PC Users Group.** Meetings: 1st Mon., 7:30 pm, Ramada Inn, Conference Room A, 324 E. Shaw Ave., Fresno. Call: (209)496-3974. [Exp. #134.]

**Greater South Bay PC User Group.** Meetings: 2nd Thurs., 7:30 pm, Torrance Recreation Center located behind the main city library, Torrance. Visitors welcome. Call: (310)335-2799. [Exp. #137.]

**Long Beach IBM PC And Compatibles Users Group.** Meetings: 3rd Wed., 7:00 pm, Masonic Temple, 5155 E. Pacific Coast Hwy., Long Beach. Novice and experienced welcome, BBS, public domain library, newsletter, SIGs. $25/year, $35 for families. Call: Jim Wells, (213)439-7114. [Exp. #139.]

**MicroLink PC Users Group.** Meetings: 1st Sat., 6:00 pm, La Habra Sr. Center, 165 E. La Habra Blvd., La Habra. Friendly group committed to helping people of all skill levels. Call: (714)491-6069. [Exp. #137.]

**NOCCC (North Orange County Computer Club).** Meetings: 1st Sun. Computer-oriented meetings, SIGs, newsletter, raffles, and BBS. Call: (714)998-8080. [Exp. #137.]

**Orange County IBM PC Users Group.** Meetings: 2nd Tues., 6:30 pm. Speakers, software, newsletter, BBS. Open to public, all welcome. Call: (714)990-0580. [Exp. #139.]

**Pasadena IBM Users Group.** Meetings: 3rd Wed., 7:00 pm, 2184 N. Lake Ave., Altadena. Speakers on hardware/software, demonstrations, SIGs, library, newsletter, and BBS. Call: Steve Bass, (818)791-1300. [Exp. #138.]

**SCV PC Group.** Meetings: 2nd Wed., 7:00 pm, Valencia Town Center Community Room. Call: (805)298-1680. [Exp. #137.]

**South Bay All Computer Enthusiasts.** Meetings: 2nd Tues., 7:30 pm, VFW Hall, 1865 Lomita Blvd., Lomita (1 block W of Western). All skill levels. Call: Danny or Mary, (310)834-0040. [Exp. #137.]

**Southern California Computer Society.** Meetings: 4th Tues., 7:00 pm, Farmers & Merchants Bank, 12535 Seal Beach Blvd., Los Alamitos. We welcome all who are interested in IBM and compatible computers; BBS and newsletter. $15/yr. Call: Hank Burwash, (310)596-9670. [Exp. #139.]

**Thousand Oaks Personal Computer Club (TOPCC).** Meetings: 4th Thurs., 6:30 pm, Goebel Senior Adult Center, 1385 E. Janss Rd., Thousand Oaks. Call: (805)494-8675. [Exp. #139.]

**Tug-Net.** Meetings: 1st four Thurs. 7:00 pm, Glendale Federal Bank, 7119 Topanga Canyon Blvd., Canoga Park. Visitors free. Ample parking. Call: (818)249-1629 or 884-9441. [Exp. #139.]

## KAYPRO

**KAYOS Kaypro User Group.** Meetings: 4th Mon. of even months, 6:00 pm, El Segundo Library, Mariposa and Richmond streets. Call: (310)379-8339. [Exp. #137.]

## MACINTOSH

**All Computer Association Of Orange County.** Meetings: 2nd Sun., 1:00 pm, Fullerton Savings, 12860 Euclid Ave., Garden Grove. Supporting Atari, Macintosh, PC, and other computer systems. Call: (714)265-9357. [Exp. #134.]

**Champions Of The Mac Proletariat (CHOMP).** Meetings: Thurs. monthly, 7:00 pm, Cal Poly Pomona, grey building near administration building, rm. P2-7. Call: Craig Richards (909)985-7385 or Mitch Cohen, (909)598-5766. [Exp. #139.]

**Original Apple Corps.** Meetings: 2nd Sun., West LA area. Apple II and Mac user group. Support for beginners through experts. Call: Fred Duffy, (310)450-3336. [Exp. #139.]

**South Bay All Computer Enthusiasts.** Meetings: 2nd Tues., 7:30 pm, VFW Hall, 1865 Lomita Blvd., Lomita (1 block W of Western). All skill levels. Call: Danny or Mary, (310)834-0040. [Exp. #137.]

**South Bay Apple Mac User Group.** Meetings: Last Wed., 8:00 pm, El Camino College, MCSC Rm. 100, 16007 Crenshaw Blvd., Torrance. Newsletter, PD library, demos, and raffles. Call: (310)644-3315. [Exp. #137.]

**Southern California Macintosh Owners/Users Group (SMOG).** Meetings: 2nd Sat., 10:00 am, Western Digital Bldg., off 405 Freeway at Irvine Center Dr., Irvine. Speakers, product demos, Q&A, PD disks. All skill levels. Call: Dani Maloy, (909)698-7737. [Exp. #139.]

**West Orange County Macintosh User Group (WOCMUG).** Meetings: last Tues., 7:00 pm, Emerson Elementary School, 2625 Josie, Long Beach (NE corner of Palo Verde and Willow, just north of 405 fwy at Palo Verde). Come and join with other Mac Users to share knowledge and experiences. Call: Lynn Goodrich (714)892-8910 or Tony Muller (310)493-1240. [Exp. #134.]

## MUSIC

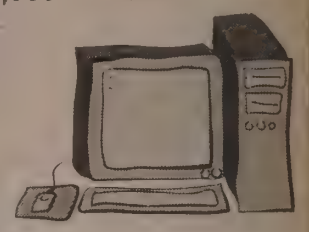
**Club Mid.** Meetings: 1st Tues., 7:00 pm get acquainted, 7:30 pm meeting, 12282 Loraleen, Garden Grove. Discuss all aspects of MIDI, music, and computers. Call: Art, (714)539-3808. [Exp. #138.]

## NETWORKING

**Los Angeles NetWare Users Group (LANet).** Meetings: 4th Tues., 6:30 pm, Novell, 11300 W. Olympic Blvd. at Sawtelle, 9th Floor, West LA. Vendor presentations and open forum. Call: SCNUA, 1-800- 532-7268. [Exp. #137.]

**Orange County Magic Users Group.** Meetings: last Wed., 7:00 pm. For users of Magic client/server tools. Call: Richard Grimm, (714)637-7718. [Exp. #137.]


finally, a good reason to use the computer.



- 16 lines
- 1200 - 14.4k bps (all lines)
- Sizzling public and private live chat out there - meet people to party with!
- 7 *fast* CD-ROM drives online, both Adult and Public Domain software
- Public & private message bases for *hot* correspondence
- running TBBS software
- Public and Private message areas
- Online Browsing of user profiles
- Huge collection of non-CD files (countless adult GIF pictures)
- See classified ads from this magazine *before* they re published!
- Several reasonable membership rates
- Now available in Southern CA!

pathway bbs
get into the swing of things
northern california 408.956.7600
Fremont, Newark area - 510.790.3127
southern california (new!) 714.236.4247
#N1 - ADULTS ONLY - Free Sample Files
Voice Info: 408.956.5650
*(membership rates can be found online.)*

FREE ACCESS
24 HOURS
Over 70,000 Files On-Line
On-Line Games
9 CD ROMS On-Line
8 Nodes
Multi-Node Chat
LARGE Adult Section
hELL'S DOOR BBS
310/903-5512 • 310/429-7070
714/891-6083 • 310/943-4729

ADULT MODEM FUN
EASY STREET
FULL INTERNET SERVICE
- Never Busy 42 Lines
- 16 Gigs of Files
- The Lounge
- 40 Online Games

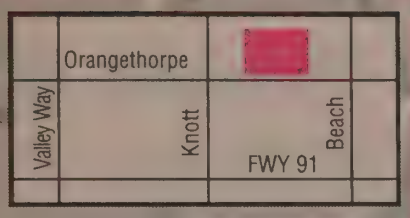
CHAT • INTERNET
FILES • GAMES • NEWS
Internet • E-Mail • Shell Access • Telnet • FTP • IRC • WWW • Disk Space • Read News • Finger and More...
Voice 909-590-5734
Placentia 714-528-3771 Chino 909-590-4307
Anaheim 714-778-5473 Cypress 714-229-9859

FREE!
On-Line Time for New Users
Give Us a Try!
Call NOW! (via Modem)
310.421.6165 714.454.9242
For numbers listed below:
At connect type: "..." hit <enter>, type "PRISM"
213.687.4902 818.564.8334
310.513.6447 818.884.2524
805.265.1943 909.350.1482
805.641.1122 909.789.1412
Call for Full List of LOCAL Numbers
- Best Price, more services
- ALL high speed to 28,800
- 4.5 gigabytes of files
- Multi-Player Games
- Parties & Social Events
- Group & Private Chat
- Adult Areas
- FREE Unlimited E-Mail
- Matchmaker & More!

INTERNET ACCESS
PRISM B.B.S. 18 & over
LOCAL CALL TO ALL OF SOUTHERN CALIFORNIA

Eden BBS
The Electronic Garden
Games • Chat • E-Mail • Forums • Friends
Fun • 32 Lines • Internet • MajorNet
Southern California's hottest Adult BBS!
FREE 15 Day No Risk Trial!
714-548-1900 • 714-530-6335 • 714-528-7226 • 714-472-9456
310-421-2420 • 310-352-4199 • 310-838-1707 • 909-279-2600

# NET COMPUTER




NET

**CALL US AT:**

**(714) 523-2367**

**FAX: (714) 523-2625**

**7033 Orangethorpe Ave.,**
**Unit A, Buena Park, CA 90621**

**Hours:**

| Monday-Friday | Saturday | Sunday & Holidays |
|---|---|---|
| 10:00am-6:00pm | By Appointment Only | Closed |

## 486 VESA Local Bus System

* 4MB RAM, 70ns 3 VESA local bus slots
* 256K Cache
* 1.44MB floppy drive
* 420MB IDE hard drive
* fast 32bit VESA local bus SVGA card with S3 chipset 1MB, 16 million colors
* fast 32bit VESA local bus Enhanced IDE controller
* 14" SVGA monitor with .28 dot pitch
* 2 serial/1 parallel/1 game ports
* minitower
* 101 enhanced keyboard

| | Regular | CASH |
|---|---|---|
| Intel DX2-66MHz | $1005 | $930 |
| Intel DX4-100MHz | $1125 | $1050 |
| AMD DX2-80MHz | $975 | $899 |
| AMD DX4-100MHz | $1090 | $1015 |

## INTEL PENTIUM
### PCI Local Bus System

intel inside

* 8MB RAM, 70ns 3 PCI local bus slots
* 256K Cache
* 1.44MB floppy drive
* 420MB IDE hard drive
* Diamond Stealth 64 PCI SVGA card with 1MB
* fast 32bit PCI local bus IDE controller
* 15" SVGA monitor with .28 dot pitch
* 2 serial/1 parallel/1 game ports
* minitower
* 101 enhanced keyboard

| | Regular | CASH |
|---|---|---|
| Pentium 60MHz | $1575 | $1500 |
| Pentium 66MHz | $1600 | $1525 |
| Pentium 90MHz | $2000 | $1925 |
| Pentium 100MHz | $2075 | $1999 |

## 486DX2/66MHz

Motherboard, 256K Cache,
VESA Local Bus, Zif Socket
**DX4 Ready, Green**

**$230**

## VEGA SERIES

486DX2/66MHz Motherboard,
256K Cache VESA Local Bus, Zif Socket
**5 Year Warranty U.S. Made**

**$299**

intel inside

## WESTERN DIGITAL

1GB Enhanced IDE Hard Drive

**$400**

## 4X MULTIMEDIA KIT

TEAC 4X CD-ROM Drive

CREATIVE Sound Blaster 16
CREATIVE LABS, INC.
w/ Multimedia Stereo Speakers

**$299**

**FINANCING AVAILABLE** VISA MasterCard DISCOVER

# Classifieds

## Accessories


AAA ACCESSORIES INCORPORATED — DISKETTES

Premium FORMATTED (100% Error Free)

| | Qty 500 | Qty 100 |
|---|---|---|
| 3.5" DS/HD | 31¢ | 32¢ |
| 3.5" DS/DD | 20¢ | 21¢ |
| 5¼" DS/HD | 19¢ | 20¢ |

We Will Beat Any Advertised Price

1-800-214-4444



XDR II Co. 800/541-7425

14755 Ventura Blvd., Ste. #713, Sherman Oaks, CA 91403-3687 — Los Angeles: 818/701-7425, Fax: 818/752-7425

DISKETTES

| Formatted | 100% Error Free | Qty 50 |
|---|---|---|
| 5.25" | DS/DD | 19¢ |
| 5.25" | DS/HD | 18¢ |
| 3.5" | DS/DD | 20¢ |
| 3.5" | DS/HD | 32¢ |

Data Cartridges

| Brand | Part Number | Qty 3 |
|---|---|---|
| 3M | DC2120 | $13.95 |
| KAO | KC2120 | $11.95 |
| 3M | DC2120 | $16.95 |
| Verb. | DL2120 | $15.95 |

*If it says:* "We will beat any advertised price"...
*It means:* "We over-charged you in the first place, and if you can catch us we will fix it."
At XDR II: "*We set the prices, they try to beat.*"

Shipping: (FOB: Los Angeles) Actual UPS/$3.95, COD +$5.00. Quantity Discount: Available. 10+ years of media experience. XDR II Co. is a Xanadu Enterprises Company. (c) 1994



**Komputer Klean Kit**- Never Wash! 8" Duster and Mini Attachment Tool Set (Attach to any Vacuum) Order #KKK-1. Only $21.00 (Includes S&H) Call: 1-(800)-994-VACS.


MICROTIMES classifieds

## Accessories


HIGH QUALITY DISKS 100% CERTIFIED

3.5" HD Formatted $0.26 Bulk Quantity

Full Line of Disks
Local Warehouse
Large Inventory
Same day shipping
Quick Response
Full Service

DUPLICATION GRADE AVAILABLE
All Other Kinds of Disks Available

(213) 268-8984

Yong Da International
2560 Corporate Place, #D108 • Monterey Park, CA 91754


## Books

**At Computer Books 4 Less**, all books are 10% to 80% Off List Price. Books for the Beginner, Intermediate and Advanced Computer Wiz. We supply Bulk Quantity Diskettes 3.5/5.25 All Formats. Call us at: (619) 431-BOOK. 8068 Clairemont Mesa Blvd., San Diego, CA 92111.

**LOOKING INTO A MONITOR**- A how to buyer's guide to computer monitors for only $3.95. Call (714) 577-9441 or send payment plus $1.09 for tax & postage to **LTD Computer Solutions**, P.O. Box 787, Brea, CA 92622. Quantity discounts available - dealer inquiries welcome.

## Bulletin Boards


The Crusader BBS

(213) 466-4482 Hollywood (310) 348-9746 Westchester

A 5 Line BBS
12 Online Cd-roms
Internet Usenet E-Mail
Chat and Games
Fidonet Conferences
100,000 + Files
Geoworks Files
All lines 14,400
2 GIG online storage

Where people count more than hardware and software.....

Register online now for 30 free min. day (limited downloads) or subscribe for $45 yr. (unlimited time and downloads).

SysOp: Jack Farmer 1:102/753


**UNZIP IT!** Download provocative adult photos. 1(900) 844-2200. 69¢ per minute. 18+.

**LIBERTY BBS** modem 800-474-1818. Local access phone numbers from 9 Calif. area codes. Internet E-mail & Usenet Newsgroups. Linked nationwide for chat 6pm - midnight every evening! Free time on first & every call!

**Modemboy**. Gay, bi, curious. Instant access, 32 lines, photos, free chat, campy fun! (310) 659-7000, (310) 417-5157, (818) 996-7900, (818) 846-3000.

**LOVE ADVICE and COMPATIBILITY EVALUATIONS** by DR. TRACY CABOT. Famous Author of LETTING GO, HOW TO MAKE A MAN FALL IN LOVE WITH YOU, HOW TO WIN THE WOMAN YOU WANT, and other bestsellers. As seen on PRODIGY, DONAHUE, OPRAH, etc. (818) 901-6117.

**Gadgets and Gizmos,** (714) 992-1732. Fun, Free, all welcome. Over 1000 items to buy! GUI and MAC term interface online.

**K2 BBS (714) 838-8100.** Multi-player DOOM, 18 lines, Internet mail, CD-ROMS, 28.8K, free trial period.

**HOMES FOR SALE ONLINE**- Modem (310) 471-6159. Almost 1,000 homes online throughout Southern California! Free to review and submit homes. Voice: (310) 649-6991 X101.

**RTS Computer BBS**, Free Access for personal usage, access to Fido and QWK message networks. Large file transfer section. Freely and helpful Sysop. Phone # (310) 677-4007.

**GAME PORT:** BBS (213) 269-9793 (Free), Voice (213) 269-9838, E-Mail: gameport@earthlink.net - Download catalogs on CD-ROMS (games/adult), Video Games (SNES/SEGA), Audio CD's, Books-on-Tape, Laser Discs, Videos, Adult Videos.

## HOW TO PLACE YOUR CLASSIFIED AD IN MICROTIMES

**MINI DISPLAYS:** 1 column inch = 1 5/16" across x 7/8" down. $59 per col/inch, camera ready art, or $59 + $20 for 1x typesetting/production fee.

**BUSINESS ADS:** Rates are $20 for 15 words or less. $.50 for each additional word. Your phone number counts as one word. First few words or line is bolded.

**CATEGORIES:** See index to choose the classification that best describes your product or service.

**FREE ADS:** Private individuals may have one free classified ad one time of 15 words or less under Hardware, Software, or Accessories only. Mail coupon by the noon deadline for that issue. no phone orders for free ads.

**No refunds** will be given after copy is received. Credit may be given under certain circumstances.

**Mail, deliver or fax this coupon along with payment by the noon deadline for that issue.**

**TO RESERVE SPACE:**
Phone Orders (213) 8518600
Fax Orders (213) 851-8303
with Visa or MasterCard Only

**CLASSIFIED CATEGORIES**
- Accessories
- Bar Coding
- Bulletin Boards
- Cartridge Refill
- CD-ROM
- Computer Rentals
- Data Conversion
- Data Recovery
- Desktop Publishing
- Hardware
  - For Sale
  - Wanted
- Miscellaneous
- Personals
- Optical Scanning
- Repairs
- Services
- Software
  - For Sale
  - Wanted

**CAREER MARKETPLACE CATEGORIES**
- Employment Information
- Jobs Offered

**CONSULTANTS NETWORK CATEGORIES**
- Accounting
- Business Opportunities
- Engineering
- Finance
- General
- LAN
- Legal
- Programming
- Technical Writing
- Training

**MULTIMEDIA**
Other_____

_____
_____
_____
_____
_____

Cost of ad_____ x number of issues to run_____ = Amt. enclosed_____
Discount: 7x = 15% 14x = 25%

Classified Career Marketplace Consultants Network Multimedia

Check/MO Visa MasterCard Credit Card #_____ Exp. Date_____

Name_____

Address_____

City_____ State_____ Zip_____

Phone (_____)_____

SEND TO: MicroTimes Classifieds, 6767 Forest Lawn Drive, Ste. 110, Los Angeles, CA 90028

**DEADLINE FOR INSERTION IN THE APRIL 3, 1995 ISSUE IS NOON ON FRIDAY, MARCH 10, 1995.**

# Classifieds

## Bulletin Boards

**INTIMATE IMAGES-** Original Adult Images & Video Clips. Free Samples. No Hourly Fees! 1200-28,800 Baud. (415) 598-0898.

## Business Opportunities

**Get Paid $268.20 per roll taking easy snapshots!** No experience. Film supplied. Call (909) 659-9757 Ext. 44.

**OK- you have a computer.** Is it making you money? Our program will generate income for you month after month. Cash in on the Super Highway. For details, send $3.00 S&H to: NETWORX, Dept. 321, 1249 S. Diamond Bar Blvd., Diamond Bar, CA 91765

## CD-ROM

**CUSTOM CD-ROM-** Put your data on CD-ROM for backup, etc. Lowest prices. (714) 992-4439.

**C. THOMAS CD-ROM DUPLICATION SERVICES.** (310) 925-8248. Back up Your Data to CD-ROM Eucarta 95- $38; Cracks, Cheats, Doom Zips- $26; 74 Min. Recordable Disks- $9.90, 63 Min. Recordable Disks- $9.80.

**BARELY LEGAL ADULT SOFTWARE.** We offer the lowest prices and widest selection of hard-to-find import CD-ROMs! Call 1-800-513-3789 for a free illustrated catalog!


CD-ROM BACKUP SERVICE
Free up your hard disk!
Make your own CD-ROM for as little as $50. Portable tape drives available for rent.
CD-ROMS "R" US • (800) 280-5151


## Cartridge Refill


Laser Toner Cartridge Re-Manufacturing
• HP, Apple, Canon & Sun Cartridges Recycled!
• Laser Printer Repairs
Open Seven Days
Tax Season Special!
HP II/III Cartridges
$36.95 with exchange
Environmental Laser
3941 W. 187th Street
Torrance, CA 90504
(310) 717-1448
(310) 515-5473
Fax: (310) 515-3673



LASER CARTRIDGE RECYCLING
Recycled Toner Cartridges
Quality as good as new!
SPECIAL
HP 4,HP 4M, and HP 4+ for $65.00
Printer Repair
For Your: Canon, Panasonic, HP, Ricoh, Xerox, IBM, NEC, And all other laser printers, copiers & fax machines.
100% Guaranteed
Each Cartridge is disassembled, inspected, and all worn parts replaced. It is then refilled with a high-grade toner and tested for maximum performance.
FREE Pickup & Delivery (We also Buy Empties)
Call Toll Free:
800-5-RECYCLE



Recycle Your Toner Cartridges
APPLE • CANON • HP • IBM
• Save 40% In Cartridge Costs
• Print Quality As Good As New
• Important Recycling Opportunity
• Fully Guaranteed
• Free Pick-Up And Delivery In Greater Los Angeles Area
$$$
(818) 305-0844 or (213) 624-0089
LAZER CARTRIDGE SERVICE
"Serving Los Angeles Since 1987"
We also buy empty cartridges


## CD - ROM


CD-ROM DRIVES
Multimedia Kits
SCSI Adapters • Sound Boards
Large selection of compact disc software
Caddies • Accessories
COMPUTERS AT LARGE
Saratoga, CA
Dedicated to CD ROM Technology
Please Call for Our Price List
800-642-4194 408-255-1081
408-255-2388 Fax
email address: cal@aimnet.com
URL http://www.aimnet.com/cal



SPICOM MULTIMEDIA
IBM / MAC
• CD Rom Drives Int/Ext.
• Titles Largest Selection of New & Pre-owned Cd's, over 600.
• Convert your data and/or backups to CD Rom.
1640-A S La Cienega Bl
310 - 205 0712


## Consulting


Capitalize on Your Experience... Increase Your Income...
Attend the One-Day Seminar...
HOW TO START & BUILD A PROFITABLE COMPUTER CONSULTING PRACTICE
FULL-TIME or PART-TIME
Sat. Mar. 25, San Diego
Sat. Apr. 22, Irvine
Offered Monthly
(213) 321-9342
William Mooney Associates
The Center for Consulting & Professional Practices
19401 S. Vermont Ave., Ste J-102D
Torrance, CA 90502


## Data Conversion

**DATA CONVERSION-** 9 Track main frame tapes converted to 5 1/4 ", 3 1/2" or QIC 80 tape (Conners 250 tapes) for PC users. Fields extracted, data bases created. Guaranteed lowest price. Call Lonnie Reed @ (800) 955-0969.

COMPUTER DISK & TAPE CONVERSIONS
Micros • Minis • Mainframes
Floppies, CD's, 1/2" & Cartridges
DATA CONVERSION SERVICES
(800) 327-0330


## CD - ROM

## Data Recovery


DATA RECOVERY
24 Hour Turnaround • Free Estimate
DATA-ONE
(408) 434-1002
940 Rincon Cir. San Jose
( HWY 880 & Montague )
9-5 Mon thru Fri



DATA RECOVERY
• Data returned "Plug & Play" on your drive.
• 90% Success rate.
• No recovery - No charge, when you mention this ad.
• Rapid turnaround.
• Reasonable Rates
DRIVE SERVICE COMPANY
Disk Drive Technical Data and Formatting Guide V.5 Now Available
Visa and MasterCard accepted
3303 Harbor Blvd., Ste. E7 • Costa Mesa, CA 92626
Tel: 714/549-DISK (3475) • Fax: 714/549-9752



• Recover your data even if it was refused from other company.
DATA RECOVERY
• MACINTOSH
• OS/2 • UNIX
• DOS • FLOPPY DISK
• NOVELL 286/386
• Lastest technology
• Highest success rate
4446 INDUSTRIAL ST
SIMI VALLEY CA 93063
MICRO COM
TEL 805-582-9082
FAX 805-582-9102



Ontrack Data Recovery
The world leader in professional data recovery services!
•Expertise in DOS, Novell, Macintosh, OS/2, Unix, Xenix, DEC, Sun, Wang, Banyan Vines and more!
•Service available on DAT, tape backups, and removable media.
•Professional service authorized by Conner, Iomega, Maxtor, Micropolis, Quantum, Rodime, Seagate, and Western Digital
•For fast, successful results call Ontrack!
Ontrack DATA RECOVERY
Coming Soon...Ontrack Data Recovery in Japan!
2400 Main Street, Suite 200, Irvine, CA 92714
1-800 752-7557
714-263 9245
MN: 1-800-872-2599
UK: 44-81 974 5522
Germany: 0130-815-198
France: 05 90 72 42


## Data Recovery


DATA RECOVERY IN HOURS.
■ One-Day standard turnaround.
■ Over 10 years of experience with clients like NASA, Apple, & FedEx.
■ We've recovered more than half-a-million megabytes of lost data.
■ On-Site & Courier service available.
■ Successful recovery is guaranteed.
■ Call 24-hours a day.
LAZARUS DATA RECOVERY
800-341-DATA
Ask for the Lazarus Technical Data Recovery Guide.
415-495-5556 FAX 415-495-5553 RESTRICTIONS MAY APPLY
381 Clementina Street • San Francisco, California 94103


## Consulting

**Looking to automate your office? Are you in that transition but wasn't satisfied with the service?** Here's the right people that can deliver and finish the job. **"On Target Business Solutions"** Custom Programming, Networking, Training, and Other inquires are welcome. Call now for a FREE initial consultation! (213) 251-3884.

## Desktop Publishing

**FREE GRAPHICS!** 1.4 Disk PCX Format. Send $.64 SASE to ASG, 16787 Beach Blvd. #733, Huntington Beach, CA 92647.

## Hardware

**LAPTOP LOSING POWER?** Have your power pack rebuilt with NEW cells at a 50% savings over the cost of a new pack! Increase your usage time with HIGH CAPACITY CELLS! Fully Guaranteed! Call the N-CAD Lady @ (909) 698-1901.

## Hardware

**TIRED EYES?** Use the only 17" monitor that really refreshes! 80HZ @ 1280x1024. the choice of five magazines, #1 IN JAPAN, 3 year warranty, IDEK Visionmaster 8617, highest performance, LOWEST PRICE, factory authorized dealer, 15 and 21" also available, Call (619) 481-6787.

# Classifieds

## Hardware


120 W STEREO AMPLIFIER for MULTIMEDIA

$475 unique

internal external rack-mount models

LOGOSOL electronic engineering

Tel: (310) 273-2934
Fax: (310) 273-1486



WE BUY MEMORY
SIMM - SIPP - DIP - ZIP - SOJ
We'll BUY/TRADE all types
>NEW >OLD >UNSURE
Call (714) 540-5137
FAX List etc. (714) 540-5139
Ask about our TRADE-IN program



MEMORY
BUY AND SELL
SIMM • DIP • SOJ • ZIP
Guaranteed Lowest Prices
Upgrades for Desktops, Laptops, Laser Printers, from Apple to Zenith
LET US DO YOUR SIMM MODULE ASSEMBLY
ERITECH INTERNATIONAL
TEL: (818)244-6242
FAX: (818)502-5059

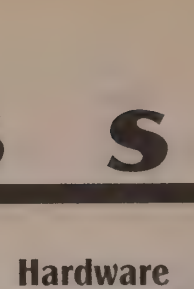


SYSTEMBOARD
green PC power management support CPU 25/33/40/50/66/75/100
- 3 VL & 4 ISA slots
$85 without CPU 256K cache
$105 with 4R6SX-33 CPU 0K cache
(310)949-0499


**HEWLETT PACKARD** Excellent prices on all types of HP Hardware. 90 day warranty on all equipment. We buy, sell, rent and repair HP products. Cal-Logic (818) 701-9005.


We Buy Memory & CPU Chips!

This MONEY could be yours!!!



TOP DOLLAR PAID!

We buy, sell and trade new and used SIMMS, CPUs, laptops and components.

We pay on the spot!! You don't have to wait for lengthy Evaluation Time.

We have been the leaders in buying and selling computer hardware since 1986!

WINDOWS MEMORY CORP.
(800) 454-9701


## Hardware


BUY – SELL – TRADE-IN
SIMM DRIVE MONITOR
*SIMM (5 YEARS WARRANTY)

| 30 PINS (70NS) | | 72 PINS (70NS) | |
|---|---|---|---|
| 256Kx9 (3 chips) | $10 | 1M:256kx32/256kx36 | $35/$36 |
| 1Mx9 (3 chips) | $34 | 2M:512kx32 | $65/$69 |
| 4Mx9 (3 chips) | $115 | 4M:1Mx32/1Mx36 | $145/$155 |
| 1Mx8 (8 chips) | $32 | 8M:2Mx32/2Mx36 | $279/$299 |
| 4Mx8 (8 chips) | $105 | 16M:4Mx32/4Mx36 | $429/$489 |

*HARDDRIVE: 1GB $399; 540MB $195; 420MB $169
*MONITOR: SVGA 14", .28, Full Screen, 1024 x 768 $189
Price subject to change without notice.
INSTALLATION: SIMM $5, HARDDRIVE $20

LINK-TRONICS
2610 Westminster Ave. #C
Santa Ana, CA 92706
Tel (714) 554-8677 · Fax 554-8122 · M-F 10 to 6


**386S X40, 85 Meg HD,** VGA Monitor. Complete System. $395.00. Call (714) 533-4671.

**386/SX 20 Packard Bell.** Excellent condition. VGA color monitor. KBRD. Mouse. 2MB RAM. 107MB HDD. $510.00. (909) 886-6942- Ask for Mike.

**Computer. Starter Set: XT** w/Hard Drive, Mono Monitor, Software. $125. Call John @ (714) 651-1453.


CASH PAID
We buy 1MB, 4MB, 8MB, 16MB SIMM.
All DRAM, Intel 486DX.
Call Day or Night at:
(310) 929-7439 or (714) 636-5550
Pager: (714) 804-1599


## Hardware Wanted

**WE BUY MEMORY** • Cash Paid in 24 Hrs • SIMM, I.C., C.P.U., SOJ, DIP, ZIPP • ZIPP, SIPP, SRAM/VRAM • I.C. Onboard, Toshiba Notebook • We also buy Compaq Notebooks and all Hewlett Packard Laser Printers• Call (818) 968-1226, (714) 268-0809, or (818) 292-9537.

**BIG CASH PAID$$$$$$.** On the spot for your new or used computer memory SIMMs RAM, CPU's, HD and components. "Don't hesitate" to call, WE are the buy back leaders! Call (800) 454-9701 or fax (619) 454-9703.

Wanted: Laserview 19" Monochrome 1987-89 Monitor Video Card for Macintosh Computer. Pay to $50.00. Call Joe @ (818) 545-8282.

**American Cancer Fund** for Children needs working computer system for office. Please call today! (818) 895-1025.

## Internet

**Add Internet to your Business.** Mosaic Publishing, On-line Catalogs, E-mail, FTP, Gopher Services. Content Development/Conversion. FutureMedia Services (714) 771-9552.

**LEONARDO INTERNET-** LA's newest and fastest Internet Service. 38.4k PPP connection allows you to use everything, including **Netscape** and the **Web**. Only $17.50/month. Free technical support for those who are new. For information call: (310) 395-5500, or http://www.leonardo.net.

## LAN

**PC & Networking Service-** Sales, Repairs & Installations. Call: RC Computer Service @ (714) 858-5608.

## Miscellaneous

**VIDEO How to assemble your own computer** from concept to completion. 286-586 systems. $19.95 plus $3.00 P&H. (818) 348-0950.

**HEALTH INSURANCE-** Blue Cross, Blue Shield, Foundation Health, major companies. High deductible catastrophic plans at **VERY** low cost. Instant coverage. **FREE INFORMATION PACKAGE.** (800) 587-0431.

**Long Beach Amateur Radio Club:** Meets First Friday Monthly @ 7pm. 1708 E. Hill Street, Signal Hill. (714) 636-9840.

## Optical Scanning

**Scan Images for Your P.C.** B/W - GRAYSCALE - COLOR. GIF/JPEG/TIFF/BMP/PCX. PHOTOS - ARTWORK - DRAWINGS. 81/2" X 14" TO 1200 DPI. Free Viewer with Order. Reasonable - Guaranteed. For More Information: AME IMAGING, 22431-B Antonio Pkwy #611, RSM, CA 92688. Voice: (714) 858-4390, Email: ameimage@aol.com.

## Personals

**ADULTS! "The BEST for LESS"** 49 cents per/min. Talk to, date hot local women tonight. Fantasies fulfilled! (408) 345-7051.

**CHRISTIAN SINGLES-** Meet Christian singles. Color pictures (optional). Additional features: list cars & homes for sale. (714) 375-0400.

## Programming

**Overseas Prog./Data Entry.** Save money - quick turnaround! VB, C++, Access, Custom Data Entry: all inquiries welcome. Local LA office: (310) 424-7705


CUSTOM PROGRAMMING
Top Experts
Low Rates
DOS, WINDOWS
Visual BASIC
Visual C++
Access, FoxPro etc.
All Platforms, Tools, Apps.
Please Call
Software A to Z Inc.
800-500-0625
(408) 263-0625
Satisfaction Guaranteed


## Repairs

**14" Monitor Repair.** $50 flat rate (parts and Labor) excludes flyback & CRT. Guaranteed for 90 days. (310) 863-6621 First Electrotech. 10948 Imperial Hwy #102, Norwalk, CA 90650.

**Routine preventative maintenance** of your PC system & more. Play it safe with **On-Time Services.** For details, call (310) 348-1360.


UniTek Co.
Hard Disc Services
Specializing in repair of PRIAM
CONNER, MAXTOR, SEAGATE Hard Drives
From 85¢ per MB
(408) 263-9994



Your Mac Broke Down?
Need Repair/Upgrade?
Call
(800) 622-7977
(408) 747-1555
Fax (408) 747-1110
We will BEAT any competitive price
Motherboard repair as low as .... $75.00
Power supply repair as low as .... $45.00
800K/1.4M Floppy drives ..... $59/$75
Powerbook repair specialist ..... CALL!!
LaserWriter ..... CALL!!
24 HOUR SERVICE TURNAROUND
LONGER WARRANTY/FREE DIAGNOSTIC
DT&T Macintosh Service

# Classifieds

## Repairs


**Starcom VIII**
*Full Service Computer Repair Center*
IBM AND COMPATIBLES
*Monitors.....*
•VGA & Super VGA repair: $40.00 flat rate!
*Give us 10 or more, and pay only $35.00 per monitor.*
• Mono repair : $35.00 flat rate!
*Give us 10 or more, and pay only $30.00 per monitor.*
*.....And More!*
• PS-2 Power Supply Repair: .....$15.00
• HP Laser Printers Repair: .....$65.00
• Printer Repair: .....$45.00
• Floppy Drive Repair: .....$15.00
• Motherboards Repair: .....$60.00
Starcom VIII 3116 Bellevue Ave., LA 90026 (213) 413-0372
90 Day Warranty on all Repairs Expect Expert Service As Well As Great Prices


**HEWLETT PACKARD** Laserjets, Deskjets, PaintJets, Vectras and other HP equipment. Experienced, quality service. On-site service available. Cal-Logic 18707 Parthenia St. #3, Northridge, CA 91324. (818) 701-9005.

**Monitor Repair Center.** Free estimates; $45 flat rate (in most cases). 1 day turnaround, 90 day warranty. Call ATV Tronics Center at: 1 (800) 873-5555.

**MONITOR REPAIR**- $50-$75 for most color repairs. Drop off in Irvine or Anaheim. COMPUTER MONITOR SERVICE, 3121-F East LaPalma, Anaheim, (714) 632-1844.

## Services

**Need Help?** Then Call IBM & Mac Experts. Networking, Data Recovery, Installation, Troubleshooting, Sales & much more. Home or Office. Satisfaction Guaranteed. NCC (818) 385-0917.

**BULLETIN BOARD SYSTEM SETUP** and MAINTENANCE. Your equipment or ours. Offer your customers/employees instant access to the online world through your own gateway. Internet connectivity. Many options available. Let's talk! DELTRONIX ENTERPRISES (714) 380-8969.

## Services

**Macintosh Training.** Effective, personal. QuarkXpress, Photoshop, PageMaker, Freehand, Illustrator, Word, Excel, ClarisWorks. Call Orchid Graphics @ (800) 899-9818.

**PC & network,** hardware & software specialists. We can solve your computing blues at your office/home or our office. Knowledge in DOS, Windows, Novell, etc. Free on-site evaluation. Call: (818) 304-2634.


**LOW VOLUME CD-R DUPLICATION**
CD PREMASTERING
• ISO 9660 • Unix
• Mac HFS • Hybrid
CD DUPLICATION
• 1-100 Units
• Bit-by-bit Verify
CD PACKAGING
• Jewel Cases • CD Packaging
• Mailers/Envelopes
FSI FUTURE SOLUTIONS, INC. 800-388-8735 714-250-1133 17921-E Skypark Cir. Irvine, CA 92714



**FOR HIRE...Typist--2,500 WPM**
*NEW! CD-ROM OUTPUT!*
Why buy expensive hardware and software? Use our cost-effective quality service.
*Any Printed Material Into Any IBM or Mac Program...FAST!*
1-800-300-SCAN Same Day Service
SCAN TYPE Scanning/OCR Services


## Services

**GUARANTEED SATISFACTION OR DON'T PAY!** Custom Windows, DOS, Unix applications and training. Hardware/software installation. Call Linas for free consultation. (714) 846-0775.

**NEED A NERD?** Consulting for Networks, Windows, DOS, Database, Accounting, Desktop Publishing, Communications, Private Instruction, Repairs, Upgrades, Sales, Home or Office. (714) 453-9631. SPECTRUM NETWORKS 10 years experience. CNE.


Don't Delay, Do it Today!!!
**DUPLICATION** Our 10th Year!
CD-ROM
IBM OS/2
MACINTOSH • APPLE
COMMODORE • UNIX
No Minimums!!! Custom Printed Labels
Optical Text Scanning
**I.D. DISK CO. (818) 882-6454**
**NATIONWIDE 1-800-882-6454**



**CATALINA TECHNOLOGY**
FULL SERVICE COMPUTER SALES, SERVICE & REPAIR
*ALL COMPATIBLES!*
SPECIALIZING IN HARD DISK REPAIR
• 2 to 5 Day Turnaround • Full Warranty On Repair
WE SELL NEW & RECONDITIONED PRODUCTS!
(714) 434-9144
3422 L West MacArthur Blvd.
Santa Ana, CA 92704



ENCORE tech
Business Computing & Network Services
NOVELL.
NOVELL AUTHORIZED RESELLER
◆ CNE On-Board to Serve You
◆ Netware Installation & Upgrade
◆ FOXPRO Programming
◆ UNIX/TCPIP Administration
◆ SBT Accounting
◆ Windows Programming
Tel: (909) 468-0060
Fax: (909) 468-0077



**SERVICE - TRAINING**
*Having problems?* We have the experience to Help You! solve them.
Upgrades
Network
Repairs
On site Service
*Call us Now:*
*Got a new computer and don't know how to use it?*
We have the right training for you starting at:
**$50./6 hrs**
DOS
TYPING
WORDPERFECT
WINDOWS 3.1
Los Angeles (213)413-9810 | El Monte (818)443-9725 | South Bay (213)479-1368


**EXPERT COMPUTER TUTORS** will help you learn any WINDOWS or MACINTOSH programs at your home or office. Reasonable rates, fully guaranteed. Call Don Roark, Mgr @ (310) 821-6184.

**FREE CONSULTATION.** We offer low reasonable rates on Consulting, System Design, Networking, Sales and Service. On-site monthly maintenance also available. **Unicorn System Services** (714) 858-9332.


**ARCHIVE YOUR DATA TO CD FOR ONLY $79**
• 660MB CAPACITY
• MAC HFS OR ISO 9660 FORMATS
• HYBRID CDS
• MIXED MODE OR AUDIO ONLY
• SAME DAY TURNAROUND
• BEST PRICES ON BLANK 74 MEDIA
We offer complete CD-ROM manufacturing: mastering, insert printing, CD package design & fulfillment!! Professional service from California's most experienced CD-Rom bureau!
ACUTRACK SOFTWARE DUPLICATION
Tel: (510) 278-5441 • Fax: (510) 278-9520 • email: acutrack@aol.com
16592 Rolando Avenue, San Leandro, CA 94578


**MacOwl**- Install, Maintain, Troubleshoot, Network. Your Macintosh Systems Manager. (818) 585-9136. **24 Hour On-Call Service.**

**SOFTWARE SOLUTIONS** for your business. Programming and help to improve your efficiency. Windows & DOS. Databases, C/C++, VB, Clipper, etc. Call (310) 204-4703.

**PERSONAL COMPUTER SERVICES** in your home or office. Upgrades, installation, graphics, training, networks. Call BILBREY & ASSOCIATES: (310) 941-3864.

**INCOME TAX SERVICE**- Federal, California & other states, full & part-year, admendments and prior years filing. **DON'S TAX SERVICE** (310) 941-3864.

**DDP MANAGEMENT-FREE CONSULTATION.** Computer Services for businesses/homes. Hardware/software selection, installation, technical assistance, training. Call (909) 899-4030.

**Macro programming:** Visual Basic, Excel, Word, Access, dBase, SQL. Steve Henrichs (213) 945-4563 (days) or (310) 457-4169 (evenings and weekends).

**AILING PC?** A Certified Technician will come to your home/office for about half price!!! Call (714) 996-8431.

**CD-ROM BACKUP**- From Colorado Tape $45.00 1st 100 Meg, $2.50 Each Additional 20 Meg (Up to 650 Meg.) Shipping: We charge what UPS charges us. Call CD-ROM Storage Service @ (714) 531-1048.

**ONSITE COMPUTER SERVICE**- System Integration, Installation, Upgrades, Networking, Database & C Programming, UNIX, Mac, DOS, Windows, INTERNET & WWW Consulting. Call Edward & Darren 7 days @ (714) 963-1407 or (714) 774-6092.

# Classifieds

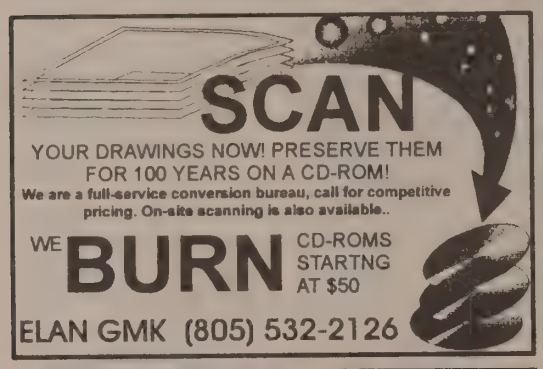
## Services

### Attn: Colorado* Users!

Are you using tape for extra storage?
Put your "backups" back on-line.
Get instant access to your archives.

SCAN TYPE®
"Services for Electronic Publishers"
1-800-300-SCAN
*Most tape drives supported. Call for list

**TAPE to CD-ROM**
**$49.00****
**Single QIC-80 tape. Add'l tapes $15.00 each
Shipping & Tax extra.
**Up to 650 MBytes/CD.**
**Complete directory structure.**

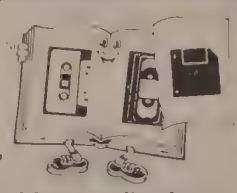

SCAN
YOUR DRAWINGS NOW! PRESERVE THEM
FOR 100 YEARS ON A CD-ROM!
We are a full-service conversion bureau, call for competitive pricing. On-site scanning is also available..
WE BURN CD-ROMS STARTNG AT $50
ELAN GMK (805) 532-2126

**SOFTWARE DUPLICATION**
Serving all of Southern California & the U.S.A. since 1980!

- •3.5"-5.25" Diskette Duplication
- •2 Pass Verification
- •CD-ROM/D.A.T. Tapes
- •Generic/Custom Packaging
- •Label/Shrink Wrapping
- •Complete Fulfillment

FSI FUTURE SOLUTIONS, INC.
17921EF SkyPark Circle
Irvine, CA 92714
1-800-FUTURE-5
(714) 250-1133

WHEN SELECTING A DUPLICATOR TAKE A PAGE FROM OUR BOOK...



*Diskette, Audio & Video Duplication*
Complete assembly and packaging services available with duplication
Proudly serving the learning, Educational and Publishing industries since 1971

TAPETTE CORPORATION
5 Whatney • Irvine, CA. 92718
Phone (714) 588-7000 • FAX (714) 859-7801
Member IIAA

**DATABASE**
Custom Programming

- * High Quality Development
- * Very Reasonable Rates
- * Free Initial Consultation
- * All Applications Network Ready
- * Acctng, Financial, Inventory, etc.
- * Dos/Windows/Macintosh

Specializing in Fox Pro development
DataVision 310-430-3857

**Feeling lost? Wandering around looking for a good computer deal? Shop with us, at MICROTIMES**

## Services

**Increase your client base,** put your business on-line, and reach thousands of Californians as well as millions of potential Internet User's. California On-Line by EIN will create a digital ad promoting your Business and/or Digitally catalog your products in 24 bit color to be used on our Network or another network of your choice. DON'T WAIT.....CALL NOW! (800) 994-4346 or (310) 417-8323.

## Software

**WE BUY SOFTWARE**
All Types and Quantities.
**CASH PAID!**
Call (714) 219-0539

**COOK IT!** Complete PC Cookery Companion, 1000+ Authentically Delicious Recipes, Free! Send $5.95 S&H to: IMP Concepts, Box 80764, RSM, CA 92688.

**Commodore 64** original software $10.00 unopened. Call (310) 973-2129.

**FROM START TO SUCCESS!** New Mail Order Business Software. Learn Techniques for Starting and Building a Mail Order Business! Only $7.95! plus $2.00 S&H: Coast Communications, 3841 4th Ave. #302, San Diego, CA 92103, Dept. MT3.

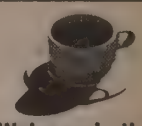
**Your own photos as Windows screen saver!!!** Mail 10 photos with a check or M.O. for $9.99 to: NDI, 12912 Brookhurst Street, Suite 400-J, Garden Grove, CA 92640. Phone (714) 741-7430, Email: naeem@aol.com.

## Software

**Novell Netware** 3,12 Original complete. 1 set student study guide. Sale- $99.00 only. Please call (213) 463-7652. Ask for Rahman.

**MONEY MANAGER-** Now organize your finances quickly and easily with the newest, most powerful personal finance software. Only $39.95 + $5.00 S&H to: Arnoldus Publications, 1146 N. Central, Suite 322, Glendale, CA 91202.

## Software



**Wake up in the morning with a cup of jo and your MICROTIMES, Southern California's Computer Magazine.**

## Telecommunications

**Are You Missing Phone Calls ?**

PBX Systems - Business Phones
Multi-line, Multi-lingual Voicemail
Auto Attendent - Audio Text -
Unlimited mailbox

PC Based Business Phone Systems

*Your PC can 'Talk' for you !!*
Best For Small to medium sized Companies
Free Estimates
(818) 288-7774
TouchVoice Corporation
7459 Toll Drive, S. San Gabriel, CA 91770

## Telecommunications

## Training

**NOVELL NETWORKS & PC TRAINING**

- • Instructor-led, Hands-on classes
- • CNA, CNE, ECNE, PC Certificate Programs
- • DOS, Excel, FoxPro, Word, NT, Power Point, Visual Basic
- • Experienced, Degreed, Certified Instructors
- • Day, Evening, Weekend sessions

Training Locations: Irvine, Fresno, San Jose, San Diego
**HiTek Solutions (714) 474-8270**

## Training

**Just Peachee!!** Get the most out of your Peachtree Complete. Full training and set-up on all versions. Call Valerie @ (714) 985-3295.

MICROTIMES classifieds

## Software

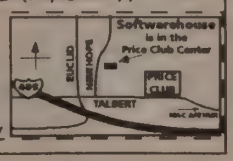
**SOFTWAREHOUSE**
A "No Frills" Software Store
The ugliest software store you've ever seen, but the best prices anywhere

Some of This Month's Specials

| | Competitors Price | Our Price |
|---|---|---|
| Peachtree Accounting for Windows | $129.99 | $89.95 |
| Microsoft Dos 6.22 Upgrade | $49.95 | $29.95 |
| Microsoft Word 6.0 for Windows | $299.99 | $229.95 |
| Microsoft Publisher for Windows | $99.99 | $69.95 |
| Rise of the Robots CD | $49.95 | $29.95 |
| Math Blaster Plus | $39.99 | $24.95 |
| WordPerfect 6.1 for Windows | $269.99 | $199.95 |
| Microsoft Access 2.0 | $299.99 | $199.95 |
| Calender Creator for Windows | $39.99 | $24.95 |
| F117A Stealth Fighter for MAC | $49.99 | $29.95 |
| Star Trek Screen Saver for windows | $29.99 | $19.95 |
| Kids Educational Programs | Starting at $10.00 | |
| MACINTOSH CD-ROMS | Starting at $5.95 | |
| ADULTS ONLY CD-ROMS | Starting at $14.95 | |

OPEN 7 DAYS A WEEK
While Supplies Last Hurry, Hurry, Hurry!!
1000's of other software titles at unheard of Prices Starting at 50¢
Mon-Fri 10 TO 8 SAT & SUN 10 TO 6
Softwarehouse
17850 Newhope st. #102 Fountain Valley, CA 92708
(714)434-4797 Fax (714)434-4799

Super Savings Coupon
20% off Any Software
up to $25 off Total Purchase
Not valid with any other offer Expires 4-10-95 One per Family



# Career Marketplace

## Employment


### Senior PC Systems Engineer

The Xerox Palo Alto Research Center (PARC) has an opening for a senior person to help lead in the development and support of a growing PC platform within the Center. This person would assist with designing and architecting the systems support structure for PCs, and work on the integration of these systems within the present computing infrastructure.

This position requires a BS in Computer Science, or equivalent, 7+ years' experience with networked PCs in a large computing environment, and 3+ years' experience in leading support/ development activities in a diverse computing environment including TCP/IP and UNIX systems. A solid understanding of the various PC configurations and experience with installing, configuring, and supporting them in large heterogeneous network installations also required. Background in Novell®, PC/NFS, electronic mail and other related PC network systems essential. Working knowledge of TCP/IP, NetBEUI, IPX/SPX and other protocols a must.

Xerox offers competitive salaries and excellent benefits. We also offer outstanding professional development in a forward-thinking environment. For consideration, please send your resume to: Bill Skinner, Human Resources, Palo Alto Research Center, 3333 Coyote Hill Road, Palo Alto, CA 94304. No phone calls please. Xerox is an equal opportunity employer committed to the principles of work force diversity.

Trademarks are registered to their respective companies.

THE DOCUMENT COMPANY
XEROX



### ADVERTISING PRODUCTION MANAGER & CLERKS

Westside ad service bureau has immediate openings for task oriented individuals with Macintosh experience for PRODUCTION MANAGER and PRODUCTION CLERKS. Photoshop, Quark, and Word experience required. Scanning and pre-press experience preferred. Please send resume with salary history to:

P.O. Box 92343, Los Angeles, CA 90009-2343
Attn: Job Number 1127

EOE M/F/D/V


## Employment


**From Novice to Pro in One Week.** Professionals only. Day 1- Applications, Day 2- DOS/Windows, Day 3- Networking, Day 4- Internet, Day 5- Programming, $129 each or $495 for all. Hands-on and guaranteed effective. Includes job opportunities. Day, evening, and weekend classes. Call 800-76-INSTA.

**Computer Consultant.** Minimum 5 years in computers: Hardware/Software/Networking. Make extra income in your idle time providing tech support or on-site training/repair/programming. Opportunities in L.A., San Jose, Seattle, Phoenix and other Western U.S. cities! Call (800) 76-INSTA.

**Software Demonstrators Wanted**- Must be familiar with Windows and business software. Travel required. Send Resume: Business Software Seminars, 32545 B. Golden Lantern #285, Dana Point, CA 92629.

"CURRENT EMPLOYMENT OPPORTUNITIES"
- SOFTWARE DEVELOPMENT - C++, 80x86
- SOFTWARE ENG. - C, Hdwr, Interface, Psuedo Code
- FIELD SERVICE - PC Support
- MAC TECHNICIANS - (Software & Hardware)
- HELP DESK - IBM & Macintosh
- NETWORK SPECIALISTS - Cert. not mandatory

*Rush resume for immediate consideration*

VOLT SERVICES GROUP
500 South Douglas Street
El Segundo, California 90245
(310) 640-1170 • Fax (310) 640-1583

Let MICROTIMES be your key to success. Advertise with us, Southern California's Computer Magazine.


# Resources

## Calendar Of Events *continued from page 219*

**March 23–April 27 Mac For Broadcast Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 24–26 Technical Desktop Video And Tools Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 27 System Administration 5.x Class.** Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

**March 27–29 Adobe Illustrator Fundamentals Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 27–29 Virtus Walkthrough Pro Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**March 30–31 Advanced PC Troubleshooting Seminar.** Fresno. Essential Seminars. Call: 1-800-723-7025.

**March 30–31 Advanced Troubleshooting For The Macintosh Seminar.** Irvine. Data-Tech Institute. Call: (201)478-5400.

**March 31–April 2 Basic 3D Tools Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

### April

**April 1 Adobe Premiere MC Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**April 3 Hollywood In Cyberspace: Staking Your Claim On The Online Frontier Seminar.** Hollywood. Sensational Seminars. Call: Nina Steiner, (310)288-3425, email: *sensational@earthlink.net* .

**April 3–4 Fundamentals Of Data Communications And Local Area Networks Seminar.** Anaheim. Data-Tech Institute. Call: (201)478-5400.

**April 3–4 Software Testing And Quality Assurance Seminar.** Irvine. Data-Tech Institute. Call: (201)478-5400.

**April 3–5 Basic Imaging With Photoshop III Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**April 4 Certified Software Manager Seminar.** Los Angeles. Software Publishers Association. Call: Becky Howland, (202)452-1600 ext. 367.

**April 4–5 KPT Bryce Canyon Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**April 6–7 Netware Basic Training Seminar.** Costa Mesa. Center for Advanced Professional Development. Call: (714)261-0240.

**April 6–June 22 Demystifying Computers For Designers Class.** Los Angeles. UCLA Extension. Call: (310)206-1422.

**April 7–9 Jumpstart Imaging II Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**April 8–9 Adobe After Effects Master Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**April 10–11 Troubleshooting And Fine-Tuning The Networked PC Seminar.** Irvine. Data-Tech Institute. Call: (201)478-5400.

**April 10–13 Network And Computer Security: Principles And Applications Class.** Los Angeles. UCLA Extension. Call: (310)825-1047, email: *mhenness@unex.ucla.edu* .

**April 11–12 Windows Multimedia Production With Microsoft Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**April 17 Advanced System Administration 5.x Class.** Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

**April 17–19 AppleScript Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

**April 17–19 Radius Digital Video Training Class.** Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

PC CLUB

# LOWEST PRICES

## WHOLESALE – OPEN TO THE PUBLIC

### MEMORY SPECIAL

**30 Pin SIMM**

1MBx3-70 ..... CALL

4MBx9-70.... CALL

**72 Pin SIMM**

1x36 (4MB) ... CALL

2x36 (8MB) .. CALL

Macintosh Memory Available

### MANAGER'S SPECIAL

**486DX2-66 CPU & MOTHERBOARD**

- 486DX4-100 Ready
- ZIF Socket
- 30/72 Pin
- 3VLB Slots
- 128K Cache
- Fan

$199

### PENTIUM CPU SPECIALS

BEST BUY

Pentium 90 MHz .....

[illegible] .....

486DX4-100 Intel.....$29[illegible]

486DX4-100 Overdrive Intel.....[illegible]

[illegible]

486DX2-80 AMD .....[illegible]

486DX4-100 AMD .....$239

486DX2-66 Cyrix/IBM.....$139

486DX2-50 IBM Blue Lightning ...$[illegible]

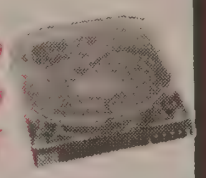
### IDE HARD DRIVES

**CONNER, MAXTOR, WESTERN DIGITAL, QUANTUM, HP & MICROPOLIS**

1.2 GIG..$419

540 MB ..$199

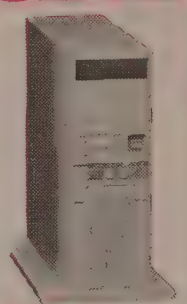
420 MB ..$175



### 486DX4-100 SYSTEM SPECIAL

- 3 VLB Slots
- 256K Cache
- 4MB RAM
- Medium Tower w/230W PS
- 1.2 & 1.44 Floppy Drives
- Local Bus 1MB Video
- 2 High Speed Serial Ports
- 1 High Speed Bidirectional Parallel Port
- 540 MB Hard Drive IDE
- 101 Keyboard
- Monitor not included

$999



### GRAPHICS ACCELERATOR

- VESA Local Bus
- Trident 9440 Chipset
- 1280 x 1024
- 1MB Upgradable to 2MB

$75

**PCI GRAPHICS ACCELERATOR**

- S3 864 Chipset
- 64 Bit
- 1280 x 1024
- 2MB

$175

### TEAC FLOPPY DRIVES

- 1.44MB, 3.5" $33
- 1.2MB, 5.25" $43

### FAX MODEM

- V.42
- MNP5 w/16550 UART Chip
- 4-in-1 WinFax

14.4 Int ..... $59

14.4 Ext ..... $99

28.8 Int..... $169

28.8 Ext..... $189

Auto Voice Fax Data Modem14.4 Int. ..... $89

### IDE/IO $12

- 2S/1P/1G

### VLB IDE/IO $25

- 2S/1P/1G

### ENHANCED VLB IDE/IO $59

- 4HDD, 4FDD
- On Board BIOS
- Supports 540 + Hard Drives

### 486 VLB 66-MHz SYSTEM

- 486DX4-100 Ready
- 486DX2-66
- 3 VESA Local Bus Slots
- 256K Cache
- 4MB Ram
- Mini Tower w/230 W PS
- 1.2 & 1.44 Floppy Drive
- Local Bus SVGA w/16M Colors
- Local Bus IDE Controller
- 2S/1P/1G
- 101 Keyboard
- 420 MB Hard Drive
- Monitor not included

$889

intel inside

### MINI TOWER CASE

- 2 x 5.25 Bays
- 2 x 3.5 Bays
- 230W PS

$35

### 486SLC Motherboard

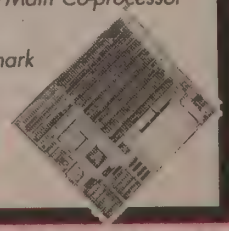
- Includes CPU
- 6 Slots
- AMI BIOS

33MHz..... $59

### 486DLC-40 Motherboard

- Includes CPU/Math Co-processor
- 128K Cache
- 129.77 Landmark Performance

$109

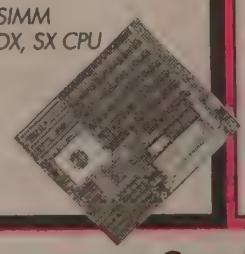


### 486 VLB GREEN Motherboard

- 256K Cache
- 30 Pin/72 Pin SIMM
- 486 DX4, DX2, DX, SX CPU
- ZIF Socket
- 3 VLB Slots

$99

- CPU Not Included



### Pentium PCI 90 MHz Motherboard

- 4 PCI
- Up to 128MB
- 256K Cache up to 512K
- 2 High Speed Serial Ports
- 1 High Speed Bi-Directional Parallel port

$249

- CPU Not Included

PC CLUB

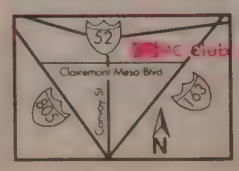
**Hours:**
**Mon-Fri 10:00-8:00**
**Saturday 10:00-7:00**
**Sunday 11:00-6:00**
**Financing Available**

SATISFACTION GUARANTEED!

PC Club offers 7 days return on all hardware products. 30 days for exchanges on defective products. Some restrictions may apply. See in store for details.

**90 days same as cash.**

Prices subject to change without notice. Product availability subject to change.




**San Diego Location**

8014 Clairemont Mesa Blvd.

San Diego, CA 92111

**Fax: (619) 277-8508**

**Tel: (619) 277-8151**

MasterCard

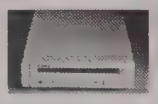
VISA

# GRAND OPENING!

## RESELLER PRICES ARE EVEN BETTER

**PC CLUB**

### SONY 55E 2X CD-ROM



- IDE
- 250ms Access Time
- 300K Transfer Rate
- CD-I/Video-CD/Photo-CD Compatible

**$112**

### MONITOR SPECIAL

**EVERVIEW/ORCHESTRA**

- 14" SVGA .39 ..... $179
- 14" SVGA .28 ..... $189
- 14" SVGA .28 NI ..... $209
- 15" SVGA .28 NI ..... $289
- 17" SVGA .42 ..... $399

**ACERVIEW**

- 15" 56L SVGA NI ..... $349
- 17" 76L SVGA NI ..... $699

**MAG**

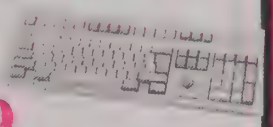
- DX-15F 15" SVGA NI ..... $339

**VIEWSONIC**

- 15ES15" SVGA NI ..... $339
- 17G 17" SVGA Green Digital NI ..... $699

### FOCUS TRACKBALL KEYBOARD

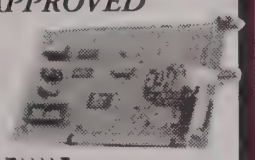
With Built-in Trackball
- 101 Keys



**$39**

While quantities last

### NETWORK CARDS NOVELL APPROVED 2-IN-1



- BNC
- 10 Base T
- Jumperless

**$29**

NOVELL.

### PENTIUM 90MHz BLOWOUT

- 4 PCI
- 256K Cache
- 8MB RAM
- Medium Tower w/230W PS
- 1.2 & 1.44 Floppy Drives
- PCI S3 2MB Video
- 2 High Speed Serial Ports
- 1 High Speed Bidirectional Parallel Port
- 540MB Hard Drive IDE
- 101 Keyboard
- Monitor Not Included

intel inside pentium

**$1728**

### MULTIMEDIA UPGRADES

TEAC 4X Speed with Acer Magic 16 **$259**

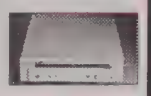
Toshiba 4X Speed with Sound Blaster 16 **$399**

### 101 ENHANCED KEYBOARD

**$13**

### 4X SPEED MULTIMEDIA KIT

- Toshiba 4X CD ROM 15ms Access Time
- Sound Blaster 16 SCSI
- Speakers
- 14 CD Titles Include: Compton's Interactive Encyclopedia, World & US Atlas, etc.



**$449**

### CREATIVE

CREATIVE LABS, INC.

**SOUND CARDS**

- 16 Basic ..... $89
- 16 SCSI ..... $159
- 16 ASP/Multi CD ..... $186
- 16 ASP/SCSI 2 ..... $199
- 32 AWE ..... $289

### MULTIMEDIA SYSTEM SPECIAL!

**486DX2-66 MULTIMEDIA SYSTEM**

- Mini Tower w/230W PS
- 486DX4-100 Ready
- 3 VESA Local Bus Slots
- 256K Cache
- 4MB RAM
- 420MB Hard Drive
- 1.44MB Floppy Drive
- Local Bus SVGA w/ 16M Colors
- Local Bus IDE Controller
- 2S/1P/1G
- 2X Speed CD-ROM
- Sound Blaster 16 Card
- 101 Keyboard
- Mouse
- 14 CD Titles
- J590 Amplified Speakers
- Monitor Not Included

intel inside

**$1168**

### HARMONY III

- Panasonic 2X CD ROM
- Acer Magic 16 MCD
- 14 CD Titles Include: Compton's Interactive Encyclopedia '95, World & US Atlas, etc.

**$249**

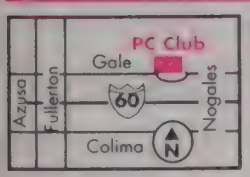
### JAZZ SPEAKERS

JS®

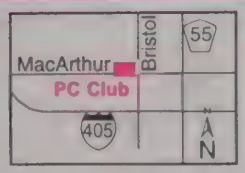
- J320AV 80W ..... $59
- J707 AV 280W ..... $149
- J818 AV 112W Per Channel ..... $159

### ATTENTION ALL RESELLERS

FREE MOUSE WITH MINIMUM PURCHASE OF $200
- Valid Resellers Permit
- Some Restrictions may Apply. See store for details.




**City of Industry**
18537 E. Gale Ave., #B
City of Industry, CA 91748
Fax: (818) 913-0123
**(818) 913-CLUB**
(2582)




NEW **South Coast Plaza Location**
1421 MacArthur Blvd., Suite F-G
Santa Ana, CA 92704
Fax: (714) 979-3151
**Tel: (714) 979-CLUB**
(2582)

**PC CLUB**

# WE CONNECT YOU ! ! !

## MPEG REAL VIDEO

Theater Quality Full Screen Video With Millions of Colors and CD Quality Audio.

*MPEG Video decoder card*
*Run CD-I, MPEG-1 Video and Audio* $250

MRV COMMUNICATIONS, INC
1-800-367-5267

WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

## PCI Local Bus Ethernet Card

*32 Bit, (AMD Chip)* $99

1-800-367-5267

WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

## CPU Chips

| | |
|---|---|
| AMD 486 DX2 66 | $160 |
| Intel 486 DX2 66 | $180 |
| Pentium 60 MHz | $325 |
| Pentium 66 MHz | $290 |
| Pentium 90 MHz | $625 |

1-800-367-5267

WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

## Intel EtherExpress 16

intel®

INVENTORY CLOSEOUT SPECIAL $45

*ISA Lan Adapter*

1-800-367-5267

WEST HILLS LAN SYSTEMS

## CPU Chips

| | |
|---|---|
| *AMD 486 DX2 66* | *$160* |
| *Intel 486 DX2 66* | *$180* |
| *Pentium 60 MHz* | *$325* |
| *Pentium 66 MHz* | *$325* |
| *Pentium 90 MHz* | *$625* |

## HD

| | |
|---|---|
| *420 MB* | *$170* |
| *540 MB* | *$215* |

## Cases

| | |
|---|---|
| *Minitower* | *$45* |

## Mother Board W/CPU

| | | |
|---|---|---|
| *50MHz Opal LX 486 SLC2-50 IBM* | *ISA* | *$100* |
| *66MHz AMD 486 DX2-66* | *3VLB 256K* | *$260* |
| *66MHz Intel 486 DX2-66* | *3VLB 256K* | *$280* |
| *60MHz Intel Pentium* | *VIP 512K* | *$550* |
| *90MHz Intel Pentium* | *Intel 256K* | *$925* |

## Special Offers

*Microsoft Windows for Work Groups Version 3.1 Network Kit Hardware & Software* *$55*

1-800-367-5267

WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

## High Performance ETHERNET Products

### Ethernet Hubs

| | |
|---|---|
| 8 RJ45, 1 AUI, 1 BNC | $135 |
| 12 RJ45, 1 AUI, 1 BNC | $299 |

### Ethernet Repeaters

| | |
|---|---|
| 2 BNC, 2 AUI | $185 |
| 4 BNC, 4 AUI | $310 |

### VLB Ethernet Cards

| | |
|---|---|
| VLB, 3 in One ( SMC Chip ) | $99 |

### Ethernet Adapters

| | |
|---|---|
| NE2000, Combo, Jumperless | $35 |
| NE2000, TP, Jumperless | $32 |
| NE2000, BNC, Jumperless | $32 |
| EISA 32 Bit, 3 in one | $160 |

### Network Software

| | |
|---|---|
| Personal NetWare | $53 |
| -V3.12 5/10 User | $599/1299 |

### Pocket Lan Adapter

| | |
|---|---|
| Pocket Ether TP + BNC | $99 |

### PCMCIA Eternet Adapter

| | |
|---|---|
| PCMCIA IC Lan Card BNC | $170 |
| PCMCIA IC Lan Card UTP | $170 |
| PCMCIA IC Combo Card | $185 |

### 100 Mb/s Fast Ethernet

Compatible with Cat. 3 or higher existing 4 Twisted Pair Cabling RJ45 Connections , Novell Certified

| | |
|---|---|
| Ether-100-ISA Adapter | $189 |
| Ether 100-Eisa Adapter | $315 |

VISA & MASTERCARD
Prices Subject to change without notice

1-800-367-5267

WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

# ADVERTISER BY CITY INDEX

*FOR YOUR CONVENIENCE, HERE IS A LIST OF ADVERTISERS BY COUNTY AND CITY. PLEASE SEE THE ADVERTISER INDEX ON PAGE 240 FOR THE PAGE NUMBER OF THE ADVERTISEMENT.*

## LOS ANGELES COUNTY

### City of Industry
Advanced Pro Technology
Atron
BMI Computers
CD Discount
CitiCom Computers, Inc.
Computek
Comtrade
CS Source
Dynasys
Kingsley Computer, Inc.
LTI Computer
Macro Computer
PC Club
PC Magic
PC Warehouse
Royal Electronics, Inc.
Syntax
USA Systems

### Claremont/Montclair/ Pomona/Rancho Cucamonga
Domino Computer
Computer Market Place
MS Computer

### Gardena
Computek
Kamfoz
PC Warehouse

### Hacienda Heights/Walnut
Asean
Binomial Systems
Darwin Microsystems
Domino Computer
Genisys
Hunsen Int'l
MIPSystems
Stylin Multimedia

### Hawthorne/Lawndale
ATC Computer
ATS, Inc.
Creative Computers

### Long Beach/ Paramount
KB Computer

### Los Angeles
AMCO Rents & Sales
ATC
BMI
CompuTopia
Cygma Computer
Dav Tech
Direct Net
Einstein Computer
EZ Computer
Input Automation
ITG
K&M International
Micro City
MIG Computer Systems
Narae Computer
Okidata
3-6 Computers
Uptown Computer

### Pasadena
Advanced Computer Center
Dynasys
Envision
Interact
Mt. Sierra College
New Technologies
Pasadena Computer Center
TCC Systems
The California Computer

### San Fernando Valley
Alcom Systems
Americal/CompuCal
Annex Communications
ASC Computer
ATC Computer
B-Ware Computers
Domino Computer
Earthlink Network
Electronic Music Box
Hacker Electronics
KBBS
Mars Computer
Maximus
MDW Technology
Micro City
PC Service
PC Warehouse
R-Tech Computers
Silicon Ave.
Soft Hard Systems
Trade Tek
20/20
Unitek Computer Stores
West Hills LAN

### San Gabriel Valley
American Insight
CCS
Computer Books 4 Less
Computer Pacer
Digital Micro
Goodman Music
HJ Technology
IET
Intellicomp
Kingsley Computer
Lightside, Inc.
Maximus
Micro City
NSC
PC Warehouse
Quality Computer
Silicon Ave.
Superior Computer
Symphony Computer
TSC Computer Products
West Tech

### Santa Fe Springs
Jenlish Int'l., Inc.
Melco International
New Technologies
PC Warehouse

### Santa Clarita
GCS/All Micro Services

### Santa Monica/Marina Del Rey
Authorized Service Technology
Cinenet Communications
Computer Business Center
Creative Computer
Micro League
Theta Computer

### South Bay
Advanced Computer & Technology
Alltech Electronics
CD Dossier
Domino Computer
Fry's
Input Automation
Kamfoz
KB Computer
Nova Software
PC Warehouse

### West Los Angeles
Active Business Computer
20/20 Technologies
Citicom
Creative Computer
Goodman Music
LA Computer Center
Micro Base
Okidata
Unicomp Systems
Unitek Computer Stores

## ORANGE COUNTY

### Anaheim/Fullerton
Computer Books 4 Less
Delta Internet Services
DMS-Memory Upgrades
EZ Computer
Genesis Computer Systems, Inc.
Instruction Plus
Just CD's
MagicTek Computers
MicroByte Computers
Micro DataNet
PCM Technologies
Printer Connection
ProTege Corp.
Silicon Avenue
ZyXEL

### Brea
American Tech Enhance
MicroSource
USM
Software Education of America
9th Generation

### Buena Park/Cerritos/ Norwalk
Advanced Computer Center
Advanced Computer & Technology
Computer Business Center
Computer Marketplace
EKM Computer
Mars Computers
Micro City
NET Computer

### Capistrano/Rnch. Santa Margarita/Laguna Hills/Lake Forest
Computer Max
Creative Computers
Intech
Kamfoz
K-Micro Computers
Lake Forest Computer Center
Logicache Computer, Inc.
Macro Technologies
MicroCity

### Corona/Orange/ Yorba Linda
Domino Computer
Future Computing Solutions
RPB Computer
Sone Systems, Inc.

### Cypress/Los Alamitos/ Stanton/Westminster
CP Technology
Darwin Computer
Katronic Co.
Mars Computer

### Fountain Valley
Domino Computer
Fry's
IIT Computer

### Garden Grove
C&G Computer Software Outlet
Citicom Computer, Inc.
CompuTek
CompuTopia
Kaiwan Corp.
Mars Computers
Matrixsys Group
MIG Computer Systems
ProComputer Co.

### Huntington Beach
Abcom Computer Products
Anthurium Technology Company
Computer Liquidation Center

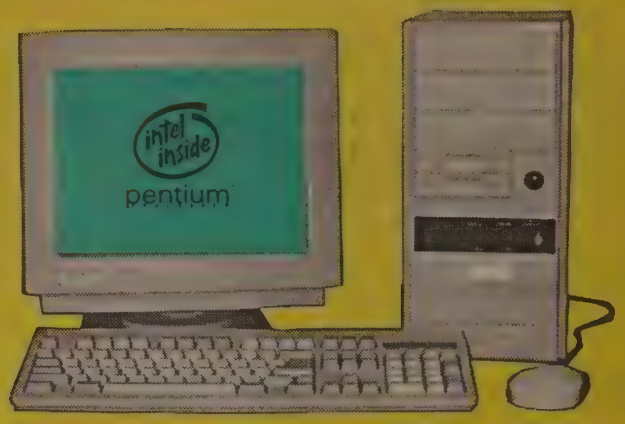
### Irvine/Newport Beach
Computer Intensive
Domino
HiTek
LAN TEC
Network Intensive
USM

### Santa Ana/Tustin
ACI Computers
ACP-Advanced Computer Products, Inc.
Alltech Electronics
Computer Max
Computix
Super Show Productions

## RIVERSIDE COUNTY
Mars Computer
Microsel, Inc.

## SAN DIEGO COUNTY
Alltech Electronics
Creative Computers
Jenlish Int'l., Inc.
Micro City
PC Club
Windows Memory Corp.

# 4X CD-ROM MULTIMEDIA SYSTEMS




## PCI POWERSTATION

- Intel Pentium™ CPU
- 256K WB Fast Cache
- 16MB RAM (Expandable to 128MB)
- 1.06GB 9ms Fast & Wide SCSI-3 Hard Drive
- PCI Adaptec 2940W Wide SCSI-3 Controller
- PCI Diamond Stealth 64 (2MB RAM) Accelerator
- 17" Mag DX17F .26mm Flat Screen Monitor
- Two High Speed Serial Ports (16550 UART) & 1 Parallel & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Teac Super-Quad (4X) 195ms CD-ROM
- Sound Blaster AWE32 Sound Card w/Advanced WaveEffects Synthesis
- 19 Popular CD Software Titles
- 115 Watt Hi-Fi Stereo Speakers
- High Quality Full Tower Case (250W UL PS)

**Pentium 75MHz .....$3199**
**Pentium 90MHz .....$3499**
**Pentium 100MHz ....$3599**

## PCI MEDIA ULTIMA

- 486DX2 or Pentium™ CPU
- 256K WB Fast Cache
- 8MB RAM (Expandable to 128MB)
- 850MB 10ms Enhanced IDE Hard Drive
- PCI Enhanced IDE HD Controller
- PCI Diamond Stealth 64 (2MB RAM) Accelerator
- 17" Mag DX17F .26mm Flat Screen Monitor
- Two High Speed Serial Ports (16550 UART) & 1 Parallel & 1 Game Port
- 1.44MB Floppy Drive
- Hi-Resolution Mouse
- 101 Key Keyboard
- Teac Super-Quad (4X) 195ms CD-ROM
- Sound Blaster 16 Sound Card
- 19 Popular CD Software Titles
- 115 Watt Hi-Fi Stereo Speakers
- High Quality Mid Tower Case (230W UL PS)

**486dx4/100MHz ....$2039**
**Pentium 75MHz.....$2219**
**Pentium 90MHz.....$2519**
**Pentium 100MHz ....$2619**

## PCI HOME OFFICE PC

- 486DX2 or Pentium™ CPU
- 256K WB Fast Cache
- 8MB RAM (Expandable to 128MB)
- 540MB 12ms IDE Hard Drive
- PCI Enhanced IDE HD Controller
- PCI Graphics Accelerator (1MB RAM)
- 15" Non-Interlaced .28mm Flat Screen Monitor
- Two High Speed Serial Ports (16550 UART) & 1 Parallel & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Double Speed (2X) CD-ROM
- Sound Blaster 16 Sound Card
- 19 Popular CD Software Titles
- 80 Watt Hi-Fi Stereo Speakers
- 14.4 Voice Fax/Modem (answer calls)
- Deluxe Mid Tower Case (230W UL PS)

**486dx2/80MHz .....$1479**
**486dx4/100MHz.....$1579**
**Pentium 75MHz.....$1759**

## PCI BEST BUY

- 486DX2 or Pentium™ CPU
- 256K WB Fast Cache
- 8MB RAM (Expandable to 128MB)
- 540MB 12ms IDE Hard Drive
- PCI Enhanced IDE HD Controller
- PCI Graphics Accelerator (1MB RAM)
- 15" Non-Interlaced .28mm Flat Screen Monitor
- Two High Speed Serial Ports (16550 UART) & 1AMD DX2-80MHz Parallel & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Deluxe Mid Tower Case (230W UL PS)

**486dx2/80MHz .....$1199**
**486dx4/100MHz .....$1299**
**Pentium 75MHz .....$1479**
**Pentium 90MHz .....$1779**
**Pentium 100MHz.....$1879**

## VLB MEDIA BEST BUY

- 486DX2 CPU & Pentium™ OverDrive Ready
- 256K WB Fast Cache
- 8MB RAM (Expandable to 128MB)
- 540MB 12ms IDE Hard Drive
- 32Bit VL-Bus IDE HD/FD Controller
- 32Bit VL-Bus Graphics Accelerator (1MB RAM)
- 15" Non-Interlaced .28mm Flat Screen Monitor
- 2 Serial Ports, 1 Parallel Port & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Double Speed (2X) CD-ROM
- Sound Blaster 16 Sound Card
- 19 Popular CD Software Titles
- 30 Watt Stereo Speakers
- Deluxe Mid Tower Case (230W UL PS)

**486dx2/66MHz.....$1349**
**486dx2/80MHz.....$1379**
**486dx4/100MHz.....$1479**

## VLB BEST BUY

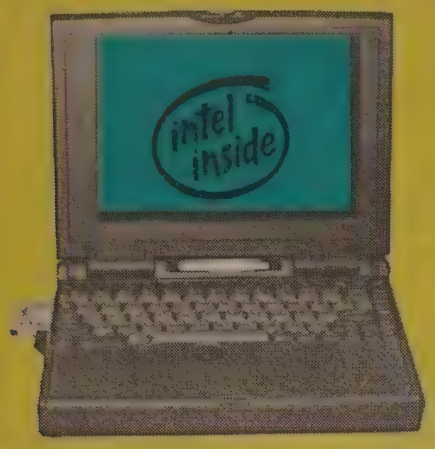
- 486DX2 CPU & Pentium™ OverDrive Ready
- 3 Vesa Local Bus Compliant Slots
- 256K WB Fast Cache
- 4MB RAM (Expandable to 128MB)
- 424MB 13ms IDE Hard Drive
- 32Bit VL-Bus IDE HD/FD Controller
- 32Bit VL-Bus Graphics Accelerator (1MB RAM)
- 14" Non-Interlaced .28mm SVGA Color Monitor
- 2 Serial Ports, 1 Parallel Port & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Deluxe Mid Tower Case (230W UL PS)

**486dx/40MHz .....$879**
**486dx2/66MHz .....$899**
**486dx2/80MHz .....$929**
**486dx4/100MHz.....$1029**

**FINANCING AVAILABLE • BUSINESS LEASING AVAILABLE**

Three Year Labor - One Year Parts Warranty Restrictions and Limitations apply. 19.8% APR for financing. Call for information on leasing. No refund on printers. Printers only carry manufacturer's warranty. Refer to printer's authorized warranty service centers for repair. We test our systems for 48 hours before shipping. A copy of our limited warranty is available prior to sale from your sales representative Prices subject to change w/out notice Not responsible for typographical errors. Prices reflect 3% cash discount.

# THE MAGICAL COLOR SOUND NOTEBOOK




- SL Enhanced 486DX-33, DX2-50/60, DX4-75/100MHz
- 4MB RAM, Easy Expand up to 20MB
- 128KB BIOS Flash ROM
- Int. 340MB Hard Disk (530/700MB)
- 3.5" 1.44MB Floppy Drive
- Ports for 1S, 1P (Bi-Directional), VGA, PS2 Keyboard, Audio Jack, Earphone out
- PCMCIA 2 Type II or 1 Type III
- 85/86-Key PC/AT w/12 Function Keys KB
- 16mm Center Micro Trackball Mouse Built-in
- 10.3" Dual Scan DSTN 640x480 Simultaneous
- 9.5" Active Scan TST 640x480 Simultaneous
- 32bit VLB w/1MB RAM Windows Accelerator NiMH Rechargable up to 4.5hr. Quick-Charge
- Weight 4.5lbs Size: 10.9"Wx8.58"Dx1.75"H
- Optional Accessories: Docking Station, External Battery Charger, Automobile Car Cable
- 1 Year Parts & Labor Warranty

| | MONO | DUAL SCAN | ACTIVE COLOR |
|---|---|---|---|
| 486DX2/66MHz | $1505 | $1955 | $2855 |
| 486DX4/100MHz | $1825 | $2275 | $3175 |

| | |
|---|---|
| 530MB HDD upgrade from 340MB | $195 |
| 700MB HDD upgrade from 340MB | 335 |
| 4MB RAM upgrade | 195 |
| Extra Battery | 95 |
| Car Adapter | 95 |
| Laplink Cable | 10 |
| PCMCIA 14.4 fax/modem | 155 |
| PCMCIA Ethernet Network Adapter | 145 |
| Docking Station for Sound Notebook | 495 |

## TEAC 4X MULTIMEDIA KIT

Sound Blaster 16 Sound Card
TEAC Super Quad (4X) Speed CD ROM
19 CD Titles Software
80 WATT HI-FI STEREO SPEAKERS

**$349**

## 4X SCSI MULTIMEDIA KIT

Sound Blaster 16 SCSI-2 Sound Card
Toshiba 3501B QUAD Speed CD ROM
19 CD Titles Software
80 WATT AMPLIFIED SPEAKERS

**$469**

## 2X MULTIMEDIA KIT

Sound Blaster 16 Sound Card
Sony 55E Double Speed CD ROM
19 CD Titles Software
80 WATT AMPLIFIED SPEAKERS

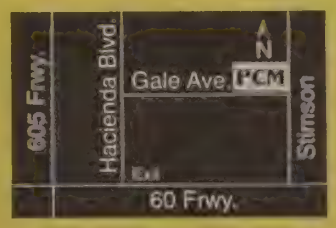
**$249**

**BUSINESS HOURS:**
**MON-FRI**
**10AM-7PM**
**SATURDAY**
**10AM-6PM**

DISCOVER VISA MasterCard

# PC Magic

**Industry: 818.336.6862**




*CITY OF INDUSTRY*
16025 Gale Ave., Suite A-4
City of Industry, CA 91745
TEL: (818) 336-6862
FAX: (818) 336-6872

# ADVERTISERS INDEX


3-6 COMPUTERS ..... 42
ABCOM COMPUTER PRODUCTS ..... 170
ACI, AMERICAN COMPONENT INT'L ..... 193
ACP SUPERSTORE ..... 61,208
ACTIVE BUSINESS COMPUTER ..... 155
ADVANCE PRO TECHNOLOGY ..... 154
ADVANCED COMPUTER & TECHNOLOGY ..... 78,79
ADVANCED COMPUTER CENTER ..... 102
ADVERTISING CONCEPTS ..... 66
ALCOM SYSTEMS ..... 76,241
ALLTECH ELECTRONICS ..... 114
ALPHA COMPUTER ..... 172,173
AMCO RENTS & SALES, INC. ..... 8
AMERICAL / COMPU CAL ..... 3
AMERICAN INSIGHT ..... 171
AMERICAN MEGA SHOWS ..... 219
AMERICAN TECH ENHANCE COMPUTER ..... 199
ANNEX TELECOMMUNICATIONS ..... 226
ANTHURIUM TECNOLOGY CO. ..... 165
ASC COMPUTER ..... 162,163
ASEAN ..... 106,107
ATC ..... 40,41
ATS ..... 158
AUTHORIZED TECHNICAL SERVICES ..... 198
AVISION LABS, INC. ..... 8
B-WARE ..... 51
BASON COMPUTER ..... 240
BINOMIAL SYSTEMS ..... 47
BMI COMPUTERS ..... 182
BONANZA SHOW PRODUCTIONS ..... 219
BORTHWICK SHOWS ..... 103
C&G COMPUTER SOFTWARE OUTLET ..... 201
CALIFORNIA COMPUTER SYSTEMS ..... 64,65
CCS COMPUTER ..... 212,213
CD-DOSSIER ..... 70
CINENET COMMUNICATIONS, INC. ..... 51
CITICOM COMPUTER, INC. ..... 31
COMPUTE INTENSIVE ..... 60
COMPUTEK ..... 25
COMPUTER BOOKS 4 LESS ..... 168
COMPUTER BUSINESS CENTER ..... 160,161
COMPUTER LIQUIDATION CENTER ..... 170
COMPUTER MARKETPLACE ..... 217
COMPUTER MAX ..... 118,119
COMPUTER PACER ..... 13
COMPUTERLANE, INC. ..... 97
COMPUTIX ..... 214
COMPUTOPIA, INC. ..... 11
COMTRADE ..... 116,117
CP TECHNOLOGY ..... 88
CREATIVE COMPUTERS ..... 7
CRL ..... 60
CS SOURCE ..... 218
CYGMA COMPUTER ..... 85
DARWIN COMPUTER ..... 50
DATABYTE ..... 29
DAV-TECH ..... 4,5
DELTA INTERNET SERVICES ..... 63
DIRECT NET ..... 62
DMS-MEMORY UPGRADES ..... 156
DOMINO COMPUTER ..... 15
DYNASYS ..... 204,205
EARTHLINK NETWORK ..... 58
EINSTEIN TECHNOLOGY ..... 196,197
ELECTRONIC MUSIC BOX ..... 190
ENVISION MULTIMEDIA ..... 179–181
EVERNET EDUCATION SERVICES ..... 54
EZ COMPUTER ..... 22
FRONTIER COMPUTER ..... 71
FRY'S ELECTRONICS ..... 2,121–151,243
FUTURE COMPUTING SOLUTIONS ..... 195
GATETRONIX CONTROL SYSTEMS ..... 86
GENESIS COMPUTER SYSTEMS, INC. ..... 30
GENISYS MICRO CONCEPTS ..... 106,107
GIGATEK ..... 113
GRANITE · DIGITAL ..... 69
HACKER ELECTRONICS ..... 10
HDSS, HARD DRIVE SUPER SOURCE ..... 210
HJ TECHNOLOGY ..... 51
I.E.T. ..... 185
IIT COMPUTER ..... 178
INPUT AUTOMATION ..... 112
INTECH ..... 56
INTERACT! ..... 50
INTERNATIONAL SPECTRUM ..... 152,153
JENLISH INTERNATIONAL ..... 187
JUST CD'S ..... 183
K & M INTERNATIONAL ..... 113
KAIWAN CORP ..... 62
KAMFOZ COMPUTER SYSTEMS ..... 75
KATRONIC COMPANY ..... 207
KB COMPUTER ..... 215
KBBS ..... 226
KINGSLEY ..... 110,111
L.A. COMPUTER CENTER ..... 152
LAKE FOREST COMPUTER CENTER ..... 34
LAN PROFESSIONAL ..... 51,70
LIBRE SERVICES COMPUTER, INC. ..... 51
LIGHTSIDE, INC. ..... 220
LOGICACHE COMPUTERS, INC. ..... 82
LTI COMPUTER ..... 159
M.I.G. COMPUTER SYSTEMS ..... 53
MACRO COMPUTER ..... 104
MACRO TECHNOLOGIES ..... 156
MAGICTEK COMPUTERS, INC. ..... 108,109
MARS COMPUTER ..... 221
MATRIXSYS ..... 201
MAX GROUP ..... 177
MAXIMUS ..... 48,49
MDM, LIMITED ..... 44
MDW TECHNOLOGIES ..... 56
MEI MICROCENTER INC./WINBOOK ..... 9
MELCO INTERNATIONAL ..... 84
MICRO BYTES COMPUTER ..... 36
MICRO DATANET ..... 223
MICRO LEAGUE ..... 169
MICRO SOURCE COMPUTERS ..... 37
MICRO-CITY/GST, INC. ..... 188,189
MICROSEL, INC. ..... 55
MIP SYSTEM, INC. ..... 68
MT. SIERRA COLLEGE ..... 69
NARAE SYSTEMS ..... 89
NET COMPUTER ..... 227
NETWORK INTENSIVE ..... 60
NEW HORIZONS LEARNING CENTER ..... 186
NEW TECHNOLOGIES ..... 72,73
NEX GEN ..... 27
NOVA SOFTWARE ..... 69
NSC COMPUTER ..... 162,163
PASADENA COMPUTER CENTER ..... 38,39
PC CLUB ..... 234,235
PC MAGIC ..... 238,239
PC SERVICE ..... 45
PC WAREHOUSE ..... 10
PCM TECHNOLOGIES ..... 192
PRO COMPUTER SERVICE COMPANY ..... 191
PROTEGE CORPORATION ..... 192
QUALITY COMPUTER ..... 110,111
R-TECH COMPUTER SALES & SVC ..... 20
RESPONZ ..... 80,81
ROBERT AUSTIN CORP ..... 24
ROYAL ELECTRONICS ..... 172,173
RPB COMPUTER ..... 211
SCCCA ..... 186
SILICON AVE. ..... 168
SMARTIMAGER CORP ..... 244
SOCRATES COMPUTER SYSTEMS ..... 90,91
SOFT-HARD SYSTEMS ..... 166
SOFTWARE EDUCATION OF AMERICA ..... 170
SOFTWARE ELECTRONICS ..... 28
SONE SYSTEMS, INC. ..... 56
STYLIN MULTIMEDIA ..... 183
SUPER SHOW PRODUCTIONS ..... 209
SUPERIOR COMPUTER ..... 211
SYMPHONY COMPUTER ..... 83
SYNTAX COMPUTER ..... 35
SYSTEM DYNAMIC GROUP ..... 204,205
THE PRINTER CONNECTION ..... 87
THETA COMPUTER ..... 57
TRADE TEK ..... 240
TSC COMPUTER ..... 162,163
UNITEK COMPUTER STORES ..... 16–19,69
USA SYSTEMS ..... 21
USM DISTRIBUTORS ..... 202,203
VANISHED CHILDREN'S ALLIANCE ..... 192
WALNUT CREEK CDROM ..... 192
WEST HILLS LAN ..... 236
WEST TECH ..... 100,101
ZYXEL ..... 108,109


This index is provided as an additional service. Although we do our best to maintain accuracy, the publisher does not assume liability for errors or omissions.


**BASON COMPUTER 1•800•238•4453**

**HARD DRIVE WAREHOUSE**

21820 NORDHOFF STREET, UNIT A • CHATSWORTH, CA 91311
(818) 727-9054 • FAX (818) 727-9064

CALL FOR LOWEST PRICES!!

**425MB**

| MAKE | MODEL | SPEED | SIZE | INT/EXT |
|---|---|---|---|---|
| Conner | 420A IDE | 12ms | 3.5"LP | $175/325 |
| HP | C2235 SCSI | 10ms | 3.5"HH | $185/285 |
| Quantum | 4250A IDE | 12ms | 3.5"LP | $175/325 |
| Seagate | 3491A IDE | 12ms | 3.5"LP | $205/355 |
| WD | 2420 IDE | 11ms | 3.5"LP | $199/349 |

**540MB**

| | | | | |
|---|---|---|---|---|
| Maxtor | 540MV IDE | 12ms | 3.5"LP | $199/349 |
| Quantum | 540A IDE | 12ms | 3.5"LP | $209/359 |
| Quantum | 540S SCSI | 12ms | 3.5"LP | $229/329 |
| Seagate | 3660A IDE | 10ms | 3.5"LP | $215/365 |
| WD | 2540 IDE | 12ms | 3.5"LP | $229/379 |
| Conner | 540A IDE | 12ms | 3.5"LP | $199/349 |

**750MB**

| | | | | |
|---|---|---|---|---|
| Quantum | 730S SCSI | 12ms | 3.5"LP | $275/375 |
| Quantum | 730A IDE | 12ms | 3.5"LP | $249/399 |

**850MB**

| | | | | |
|---|---|---|---|---|
| Conner | 850A IDE | 12ms | 3.5"LP | $309/459 |

**1.0GB**

| | | | | |
|---|---|---|---|---|
| Conner | 1060S SCSI | 10ms | 3.5"LP | $479/579 |
| Fujitsu | 2694 SCSI | 10ms | 3.5"HH | $499/599 |
| Micropolis | 2210A IDE | 10MS | 3.5"LP | $395/545 |
| Seagate | 31200N SCSI | 10ms | 3.5"LP | $525/625 |
| Seagate | 31220A IDE | 12ms | 3.5"LP | $395/545 |
| WD | 31000 IDE | 10ms | 3.5"LP | $375/525 |
| HP | 3323A SCSI | 10ms | 3.5"LP | $505/605 |
| Quantum | 1080S SCSI | 10ms | 3.5"LP | $465/565 |
| Quantum | 3105 SCSI | 9ms | 3.5"HH | $479/579 |

**1.2GB**

| | | | | |
|---|---|---|---|---|
| Maxtor | 1240S SCSI | 8ms | 3.5"HH | $559/659 |
| Conner | 1275A IDE | 12ms | 3.5"LP | $395/545 |

**1.7GB**

| MAKE | MODEL | SPEED | SIZE | INT/EXT |
|---|---|---|---|---|
| Micropolis | 2217A IDE | 10ms | 3.5"HH | $625/775 |
| Micropolis | 2217 AV SCSI | 10ms | 3.5"HH | $875/975 |

**2.0GB**

| | | | | |
|---|---|---|---|---|
| DEC | 5200S SCSI | 11ms | 5.25" | $800/900 |
| HP | 3325A SCSI | 9ms | 3.5"HH | $885/985 |
| Quantum | 2100S SCSI | 10ms | 3.5"HH | $885/985 |
| Seagate | 12400N SCSI | 9ms | 3.5"HH | $850/950 |
| Seagate | 32550N SCSI | 8ms | 3.5"HH | $995/1095 |
| Micropolis | 4221 SCSI | 9ms | 3.5"LP | $919/1019 |

**3.0GB**

| | | | | |
|---|---|---|---|---|
| DEC | 5300S SCSI | 10ms | 5.25"FH | $1199/1299 |
| Micropolis | 1936 SCSI | 12 ms | 5.25FH | $1199/1299 |

**4.0GB**

| | | | | |
|---|---|---|---|---|
| Seagate | 15230N SCSI | 9ms | 3.5"HH | $1699/1799 |
| Seagate | 15150N SCSI | 8ms | 3.5"FH | $1999/2099 |
| Micropolis | 3243 SCSI | 8ms | 3.5"HH | $1959/2059 |
| Conner | 4207S SCSI | 8ms | 3.5"HH | $1650/1750 |
| Quantum | 4301GP SCSI | 9ms | 3.5"HH | $1650/1750 |

**9.0GB**

| | | | | |
|---|---|---|---|---|
| Seagate | 410800N SCSI | 11ms | 5.25"FH | $2999/3099 |
| Micropolis | 1991 SCSI | 11ms | 5.25"FH | $2999/3099 |

**WIDE SCSI DRIVE SPECIALS**

| | | | | |
|---|---|---|---|---|
| Seagate | 31230W SCSI | Wide 9ms | 1.0GB | $599 |
| Seagate | 32430W SCSI | Wide 9ms | 2.0GB | $999 |
| Seagate | 32550W SCSI | Wide Barracuda | 2.0GB | $1105 |
| Seagate | 31523W SCSI | Wide 9ms | 4.0GB | $1909 |
| Seagate | 31515W SCSI | Wide Barracuda | 4.0GB | $2059 |
| Seagate | 410800W SCSI | Wide 11ms | 9.0GB | $3189 |

**SCSI CONTROLLERS**

ADAPTEC
1542CF, ISA ..... $165
2842 VESA ..... $249
2742 EISA ..... $309
2940 PCI ..... $235

FUTURE DOMAIN
1670 ISA ..... $85

SUNJAK
7HD/2FD/IDE&IO
All-In-One ..... $85

**TAPE DRIVES**

| CAPACITY | MAKE/INTERFACE | INT/EXT |
|---|---|---|
| 250 MB | WangDat/Archive SCSI | $400/500 |
| 525 MB | WangDat/Archive SCSI | $495/595 |
| 2GB | WangDat/Archive SCSI | $750/850 |
| 4GB | WangDat/Archive SCSI | $850/950 |
| 8GB | WangDat/Archive SCSI | $950/1050 |

HDD
RUN OUT OF CAPACITY?
NO INSTALLATION!
**EXTERNAL HI-SPEED**
***SUBSYSTEM***

- GOVERNMENT & CORPORATE PO'S ARE ACCEPTED
- NO SURCHARGE FOR CREDIT CARDS
- SAME DAY SHIPPING ON MOST ORDERS
- RETURNS NEED TO HAVE RMA #'S
- SHIPPING AND HANDLING CHARGES ARE NOT REFUNDABLE
- PRICES AND AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE

## 486 Soundbook

| 4 MB,340 MB | 9.5" Mono 64 grey | Dual Scan 10.3" Color | Active TFT 9.5" Color |
|---|---|---|---|
| 486SX-33 | $1349 | $1799 | $2449 |
| 486DX2-66 | $1449 | $1899 | $2549 |
| 486DX4-100 | $1549 | $1999 | $2649 |

* Intel 486 SL-enchanced CPU
* 128K cache
* 4 MB RAM (36 MB max)
* 1.44 MB floppy drive
* PCMCIA Type 4 slot
* Removable hard drive
* Built-in sound card, speaker and microphone
* 32-bit graphic accelerator
* 1 MB video memory
* Big 25mm trackball
* 2 NIMH battery w/hot swap
* Serial, parallel, kb, monitor, and docking station connector
* AC adapter & carrying bag

* Intel PENTIUM processor
* 256K cache
* 8 MB RAM (40 MB max)
* 1.44 MB floppy drive
* PCMCIA Type 3 slot
* Removable hard drive
* Up to 810 MB disk space
* Built-in sound card, speaker and microphone
* 32-bit graphic accelerator
* 1 MB video memory
* Big 19mm trackball
* Serial, parallel, kb, monitor, and docking station connector
* AC adapter & carrying bag

## Pentium Soundpro

| 8 MB,340 MB | Dual Scan 10.3" Color | Active TFT 9.5" Color |
|---|---|---|
| Pentium-90 | $2429 | $3129 |
| Pentium-90 | $2729 | $3429 |

## 486 Audiobook

| 4 MB,340 MB | 9.5" Mono 64 grey | Dual Scan 10.3" Color | Active TFT 9.5" Color |
|---|---|---|---|
| 486SX-33 | $1329 | $1829 | $2729 |
| 486DX2-66 | $1429 | $1929 | $2829 |
| 486DX4-100 | $1549 | $2049 | $2949 |

* Intel 486 SL-enchanced CPU
* 128K Flash ROM
* 4 MB RAM (20 MB max)
* 1.44 MB floppy drive
* PCMCIA Type 3 slot
* Built-in sound card, speaker and microphone
* 32-bit graphic accelerator
* 1 MB video memory
* Built-in 16mm trackball
* LCD status display
* Advanced power managemnt
* Serial, parallel, kb, monitor, and docking station connector
* AC adapter & carrying bag

## PENTIUM MULTIMEDIA PRO

* **INTEL Pentium CPU w/cooling fan**
* 256K Cache
* **16 MB RAM expandable to 128 MB**
* TEAC 1.44 MB floppy drive
* **1.2 GB IDE hard drive (10ms)**
* **PCI Enchanced IDE HD controller**
* Connect up to 4 hard drives
* **ATI Mach 64 PCI w/2 MB VRAM**
* **MAG 17" 1280 X 1024 NI monitor .26 dp**
* Flat screen, Digital control, Low-radiation
* 2 serial, parallel, & game ports
* Enchanced 101 key keyboard
* Medium tower case w/230 Watt
* High resolution mouse
* **Sound Blaster 16**
* **Teac 4X CD-ROM drive**
* **160 Watt Hi-Fi speakers w/DSP**

Best Buy

P-100 MHz $3149
P-90 MHz $3049
P-75 MHz $2749

## PENTIUM MULTIMEDIA

* **INTEL Pentium CPU w/cooling fan**
* 256K Cache
* **8 MB RAM expandable to 128 MB**
* TEAC 1.44 MB floppy drive
* **850 MB IDE hard drive**
* **PCI Enchanced IDE HD controller**
* Connect up to 4 hard drives
* **ATI Mach 64 PCI w/1 MB DRAM**
* **MAG 15" 1280 X 1024 NI monitor .28 dp**
* Flat screen, Digital control, Low-radiation
* 2 serial, parallel, & game ports
* Enchanced 101 key keyboard
* Medium tower case w/230 Watt
* High resolution mouse
* **Sound Blaster 16**
* **Teac 4X CD-ROM drive**
* **140 Watt Hi-Fi speakers**

Special

P-100 MHz $2299
P-90 MHz $2199
P-75 MHz $1899

## PENTIUM WORKSTATION

* **INTEL Pentium CPU w/cooling fan**
* 256K Cache
* **8 MB RAM expandable to 128 MB**
* TEAC 1.44 MB floppy drive
* **540 MB IDE hard drive**
* **PCI Enchanced IDE HD controller**
* Connect up to 4 hard drives
* **PCI graphic accelerator w/1 MB**
* **PROTON 14" 1024 X 768 monitor .28 dp**
* **Non-Interlaced, energy saving**
* 2 serial, parallel, & game ports
* Enchanced 101 key keyboard
* Medium tower case w/230 Watt
* High resolution mouse

P-100 MHz $1799
P-90 MHz $1699
P-75 MHz $1399

DOS 6.22 & Windows for Workgroup 3.11 $105
Microsoft : Encarta 95', Works, Money, Golf, Complete Baseball & more $80
Compton's 95 Interactive Encyclopedia & 13 titles $45
**(Above items sold with systems only)**

Other CD Titles - call
Joysticks (many selections) - from $15
Multimedia speakers (40 Watt to 160 Watt) - from $30
Printers (HP, Okidata, Epson) - Call

## 486 MULTIMEDIA PRO

* **INTEL pentium-overdrive ready**
* CPU cooling fan
* 256K Cache
* **16 MB RAM expandable to 128 MB**
* TEAC 1.44 MB floppy drive
* **850 MB IDE hard drive**
* **32-bit Enchanced IDE HD controller**
* Connect up to 4 hard drives
* **32-bit graphic accelerator w/1 MB**
* **MAG 15" 1280 X 1024 NI monitor .28 dp**
* Flat screen, Digital control, Low-radiation
* 2 serial, parallel, & game ports
* Enchanced 101 key keyboard
* Medium tower case w/230 Watt
* High resolution mouse
* **Sound Blaster 16**
* **Teac 4X CD-ROM drive**
* **140 Watt Hi-Fi stereo speakers**

DX4-100 MHz $1829
DX2-80 MHz $1759
DX2-66 MHz $1749

## 486 MULTIMEDIA

* **INTEL pentium-overdrive ready**
* CPU cooling fan
* 256K Cache
* **8 MB RAM expandable to 128 MB**
* TEAC 1.44 MB floppy drive
* **540 MB IDE hard drive**
* **32-bit Enchanced IDE HD controller**
* Connect up to 4 hard drives
* **32-bit graphic accelerator w/1 MB**
* **Proton 14" 1024 X 768 monitor .28 dp**
* **Non-Interlaced, energy saving**
* 2 serial, parallel, & game ports
* Enchanced 101 key keyboard
* Medium tower case w/230 Watt
* High resolution mouse
* **16-bit Sound Easy Pro**
* **SONY 2X CD-ROM drive**
* **40 Watt Hi-Fi stereo speakers**

DX4-100 MHz $1379
DX2-80 MHz $1309
DX2-66 MHz $1299

## 486 VL-BUS WORKSTATION

* **INTEL pentium-overdrive ready**
* CPU cooling fan
* 256K Cache
* **8 MB RAM expandable to 128 MB**
* TEAC 1.44 MB floppy drive
* **420 MB IDE hard drive**
* **32-bit IDE HD controller**
* **32-bit graphic accelerator w/1 MB**
* **Proton 14" 1024 X 768 monitor .28 dp**
* **Non-Interlaced, energy saving**
* 2 serial, parallel, & game ports
* Enchanced 101 key keyboard
* Mini tower case w/230 Watt
* High resolution mouse

DX4-100 MHz $1169
DX2-80 MHz $1099
DX2-66 MHz $1089

# ALCOM SYSTEMS

5634 Van Nuys Blvd., Van Nuys, CA 91401

Tel: (818) 989-9182
Fax: (818) 989-2371

Hours: M - F 9am - 5:30pm Sat 10am - 5pm

VISA MasterCard DISCOVER

Prices reflect COD cash purchase.
Please add 3% for credit card purchase.

All name brand & quality components
All systems are fully tested & burned-in for 72 hours
Free lifetime technical support
Free upgrade at no extra labor charge
Friendly customer service

**One year parts & labor warranty**
30 Days Money Back Guarantee
does not include ink or non-defective parts
On-site Service, Delivery & Setup, Training
Extended Warranty Available
Prices & specifications subject to change without notice.
Not responsible for typographical errors.

**DVORAK'S LAST COLUMN** • BY JOHN C. DVORAK

# The Bill Gates Birthday Bash In The Year 2040

## Or

## Does Dvorak Really Have A Play In Him?

**Here's the** famous "Pie Scene" from the Dvorak play *The Life and Times of the Greatest Software Salesman Who Ever Lived.*

*The year is 2040. We're in New York City at the Finnair-Moscva-Waldorf Astoria Hilton in Midtown. The hotel has been redone once again and the marble has all been removed and replaced with the more expensive wood.*

*"Ah, wood!" people would say when they came to visit.*

*There's a gala affair in the grand ballroom—Bill Gates' retirement dinner and seventieth birthday. Bill hasn't aged well; he began drooling at the age of sixty-eight. On each side seated next to him at the head of the largest dining table ever seen are two gorgeous women, a blonde and a redhead, each with a small handkerchief. Sitting nearby is Bill's fifth wife, Nancy, who watches over Bill and prompts the girls to dab the drool from his chin when necessary.*

*Some people suspect that Bill has no drooling problem at all, but loves the attention he gets from the beauties. "Get rid of the two bimbos and substitute two Greek fishermen and see how long this drooling act lasts," says Steve Ballmer, now a codger of the worst kind.*

*Gates didn't want this party. He didn't want to retire either, saying that the "young punks coming into the company are ruining it for everyone." He was particularly annoyed at their work ethic. Since the unionization of software engineers in 2005 it was illegal to have them work more than six hours a day without paying overtime wages, even if they were on salary.*

*Gates believed this trend towards working fewer and fewer hours was a bad idea. A few years earlier he had invested in a genetic engineering firm that had developed a no-side-effects stay-awake pill. With it programmers could stay up for up to seventy-two hours straight, then revive with only six hours' sleep and work another seventy-two hours. Hugo Lawwson single-handedly coded ExcelX, the world's greatest spreadsheet while using these pills. Millions in development costs were saved. The pills became controversial when Lawwson died shortly after finishing the project, exactly one week after he decided to stop taking the pills.*

*Bill Gates sits at the head. At the other end are Harry Morrison and Hank Jeeves, who always sat together and were known as Hank and Harry.*

**Hank:** Why do you suppose that Bill has made such a large table?

**Harry:** He made it clear that he wanted everyone to be able to say that they sat at Bill's table. The guy is a prince.

**Hank:** Prince? I can't even see him from here without binoculars.

**Harry:** So what? You can say you were at his table.

**Hank:** I wanted to talk to him. I was thrilled when I found out I'd be at his table. Now I find this situation. There are at least five thousand people at this table.

**Harry:** Biggest damn table I've ever seen. But nobody talks to him anymore anyway. 'Cept Mistress Nancy the boss lady up there near the front. I reckon she'll be running the company once the old man kicks.

*The scene shifts to the head of the table. Nancy is flat on the table flailing with a knife in her right hand trying to stab Bill.*

**Nancy:** KILL! KILL the beast! 666 mark of the demon! The Antichrist must die!

*Three armed goons in solid black grab her, throw her on the floor, and beat her with large batons that look more like baseball bats. She is dragged out of the dinner unconscious.*

**Bill:** Damn, another wife down the tubes. What is with these women nowadays? It's those violent TV shows, I tell you. If people went back to a seventy-hour work week this kind of thing wouldn't happen.

**Blonde:** Whatever you say...uh, darling!

**Redhead:** Hey, I saw him first!

**Blonde:** No you didn't!

**Gates didn't want** this party. He didn't want to **retire** either, saying that the **"young punks** coming into the company are **ruining it** for everyone."

**Redhead:** Liar!

*Further down the table. The contingent from Lo-Vell, the company that formed after the merger of Lotus and Novell.*

**Ben:** I can't believe it. The old man Manzi still has what it takes to do the impossible. And every time he hypnotizes one of Bill's wives Bill can't tell what's happening.

**Manzi:** Hey, I heard that. Just because I'm eighty-something doesn't mean I'm old. Or am I seventy-something? Let me think. Where are we anyway? Whatever the case I didn't do it! It was someone else. Or maybe the woman was sincere? Did anyone ever think that was possible? Do you know what Bill Gates did on the sixth month of his sixty-sixth birthday...666? Do you?

**Ben:** No, what?

**Manzi:** I don't know. I thought you might know. Was it something weird? Devilish?

**Ben:** How should I know?

**Manzi:** Maybe the guy in the black mask sitting next to me knows.

*The man takes off the mask to reveal it's Bill Gates.*

**Gates:** You mean me? As opposed to that fraud up there?

**Ben:** Not another switched persons gag!

*All the people at the table see the second Gates character and throw down their towels in disgust. Collective grumbling about the story line ensues. Actors complain about their parts in the play and how ridiculous the story is.*

**Blonde:** You mean this isn't Bill Gates and this is some sort of play I'm doing. Like acting? Well, that's a dirty trick. Who is responsible?

*She throws a piece of pie at the author, who is seated at the table.*

### Reconsiderations

Well, the story seemed like a good idea when it began. This thing will never see Broadway. ■

Copyright © 1995 by John C. Dvorak. All rights reserved.

# HEWLETT PACKARD PRINTERS

HEWLETT PACKARD Authorized Dealer

## DeskJet 320 Portable Printer

- Crisper, blacker blacks with 600 x 300 dpi printing plus HP's Resolution Enhancement Technology
- Compact, portable design fits neatly into a briefcase
- Easy-to-add color with an optional HP Color kit (sold separately) just snap in the cartridge and print

#1952331

**$289**

HEWLETT PACKARD Authorized Dealer

## DeskJet 540 InkJet Printer

- Crisper, blacker blacks with 600 x 300 dpi printing plus HP's Resolution Enhancement Technology
- Easy-to-add color with an optional HP Color kit-just snap in the cartridge and print (Color Kit Sold Separately)
- Easily handles a wide variety of paper sizes

#1952342

**$274**

HEWLETT PACKARD Authorized Dealer

## LaserJet 4P

True 600 x 600 dpi printing for four times the Resolution of conventional 300dpi printers • HP Microfine toner and Resolution Enhancement Technology for smoother, sharper graphics • Uses 50-70% less energy than comparable laser printers in Powersave mode • Prints on a wide range of paper sizes and types including mailing lables, postcards, envelopes and index cards • Enhanced HP PCL 5 for seamless compatibility with the HP LaserJet 4 printer,45 built-in scalable typefaces,2MB standard memory expandable to 26MB.

#1842050

**$904**

HEWLETT PACKARD Authorized Dealer

## LaserJet 4 Plus

**The BEST print quality in the industry**

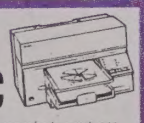
- 12 pages per minute engine and 25MHz RISC processor for faster printing
- True 600 dpi print quality for clear, crisp text and graphics
- Resolution Enhancement Technology and microfine toner for superior output quality
- Easy to set up and use
- Duplex option (sold separately)

#1908697

**$1365**

HEWLETT PACKARD Authorized Dealer

## DeskJet 1200C



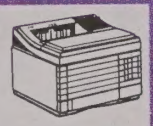
- 600 x 300 dpi black text at up to 7 pages per minute produces high-quality output at business speed.
- 300 dpi color at 1 to 2 minutes per page creates fast, high-quality output with bold, brilliant colors and true black.
- Plain-paper printing for both black and color saves money and allows convenient use of common office paper stationary.
- Built-in high-speed Centronics interface and optional HP JetDirect cards provide powerful, flexible connectivity.

#1786974

**$998**

HEWLETT PACKARD Authorized Dealer

## LaserJet 4M Plus



**The BEST print quality in the industry**

12 pages per minute printing for Macintosh and mixed Mac/Pc environments • True 600 dpi output • AdobeTM PostScriptTM Level 2 and enhanced HP PCL 5 printer languages. • 80 scalable typefaces - 35 Adobe Type1, 35 Intellifont, 10 TrueTypeTM 6MB standard, expandable up to 38MB • 250 sheet paper tray and 10-envelope multipurpose tray.

#1914571

**$1898**

HEWLETT PACKARD Authorized Dealer

## LaserJet 4Si

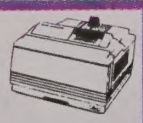
- Expandable and flexible, excellent for networks
- Fastest HP LaserJet printer at 17 ppm
- Multiple language capability with auto switching
- True 600 x 600 dpi printing with REt and microfine toner
- 75,000 page/ month duty cycle and flexible paper-handling
- HP quality and reliability

#1779583

**$2799**

HEWLETT PACKARD Authorized Dealer

## LaserJet 4V



- HP's fastest desktop printer
- Crisp 600 x 600 dpi print quality
- 16-ppm engine speed
- 33Mhz RISCprocessor with I/O buffering for unparalled performance.
- Handles a wide range of paper sizes including 11 x 17.

#1952320

**$1889**

# Canon PRINTERS

## Canon BUBBLE JET 200e PERSONAL DESKTOP PRINTER

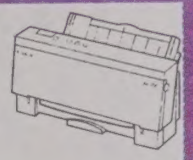
- 360 dpi for Laser-Quality Graphics and Text
- Printing Speed Rivals 4 ppm Lasers
- 100 Sheets or 15 Envelopes
- EPA Energy Star Compliant

Remanufactured to factory specifications

#1948943

**$198**

## Canon BJ-230 DESKTOP PRINTER

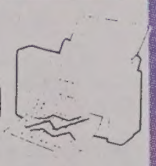


- Handles all your essential business printing needs.
- Including large formats, up to 11" X 17"
- Laser quality printing at 360 X 360 dpi.
- Laser quality, without laser price.
- For faster printing, supports bi-directional graphs.
- The BJ-230 rivals the speed of a 4 ppm laser printers.
- Compact size save space in a small office setting.
- Gives all your business documents a professional look.

#1805305

**$389**

## Canon BJC-4000 PRINTER



- Superior Laser Monochrome Resolution: 720 x 360 dpi with Smoothing
- As fast as a Laser: 5ppm
- Brilliant, Vibrant Full Color: 360 x 360 DPI
- Supports up to 16.7 Million Colors
- 2-Year Limited Warranty

#1949689

**$365**

## Canon BJC-600 PERSONAL COLOR PRINTER

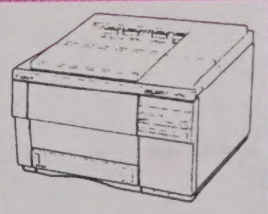
- Prints 360 DPI on plain paper for brilliant color quality.
- 100 Sheet automatic feeder for easy paper handling
- Easily handles letter and legal size paper, also envelopes and back print film.

Remanufactured to original factory specifications

#1951237

**$368**

## Canon LBP-1260 12 PPM LASER PRINTER



- Fast, High Volume Printing
- Provides Superior Print Quality
- high Resolution 600 dpi Printing and Superfine Toner
- Grows with Your Needs
- 250 Sheet Standard paper Tray; Supports up to 850 Sheets and 75 Envelopes with Options
- 15-Hour Toll Free Support
- Free 2-Year Instant Exchange Warranty

#1975905

**$1299**

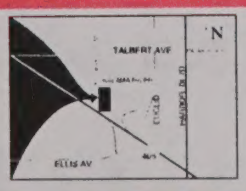
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE! ®

**Fry's ELECTRONICS**

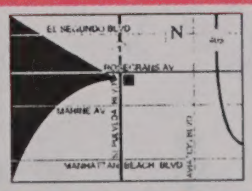
Prices Good Through March 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

**STORE HOURS**
MONDAY -FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM




**Fountain Valley**
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444




**Manhattan Beach**
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS · VISA · MasterCard

DISCOVER, VISA AND MASTERCARD ACCEPTED.

# From now on, the only paper used in GreenSoft's GreenDesk for Windows™ "Office Environment"

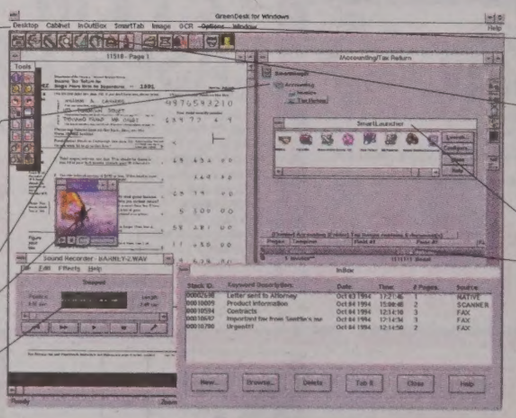
## is the paper our ads are on.

**Green Computing and Document Imaging**
At last... a paper-reducing, full featured personal document imaging system for only $99 — GreenDesk for Windows™. Integrate your computer-based and paper-based information from a single "green" desktop and cabinet– a revolutionary breakthrough in personal productivity software for SmallOffice/Home Office systems and professional users.

**Compound Folders™**
Cross-application "compound folders" manage all your information just like a paper-based file cabinet–only "greener" and smarter. GreenDesk delivers "long file name" capability today and search "across your applications"–a time saver and productivity booster.

**Electronic File Cabinet**
Manage and compress (up to 45:1) your PC-based faxes, control your scanner, and store any data, (including multimedia video and sound) for instant access.

- Faxes & scanned paper images
- Video/multimedia clips
- Voice mail & sound clips
- Integrates all your data "Across Applications"



**OCR/Document "Recycling"**
Go PaperFree. Recycle your incoming faxes and scanned paper documents into editable text for your favorite word processor with our ultra-accurate Optical Character Recognition engine.

**Customizable Database/PIM**
Use our SmartTabs database as a stand-alone, fully customizable Personal Information Manager, or as a powerful search engine to "tab" all your GreenDesk-managed documents. Also supports keyword and Boolean search across the entire cabinet.

**Program Launch/Desktop Management**
Just click on any document (or Windows "object") stored in our GreenDesk cabinet–our SmartLauncher finds the file and launches the "native" Windows applications automatically. Move beyond Windows "file manager" to a seamless "office environment" of your favorite programs and often-accessed documents.

GreenSoft Corporation
4880 Santa Rosa Road, Suite 170, Camarillo, CA 93012
(800) 588-DESK (Nation Wide Toll Free Line)
(805) 388-1700 (Corporate Headquarters) FAX: (805) 388-0660

# GreenDesk®

~~$99~~ $49. *Special Introductory Offer.*

*For Windows*

The PaperFree Software Environment For The Environment. From GreenSoft. 1-800-588-DESK.